



**KNOWLEDGE AND PRACTICES OF PRIMARY HEALTH CARE  
PROFESSIONAL NURSES: SCREENING AND IDENTIFICATION OF  
INTIMATE PARTNER VIOLENCE**

**BY**

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## DECLARATION

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I, Rehanna Felix, student number 214360865, hereby declare that the dissertation for Masters in Nursing Science is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.



**REHANNA FELIX**

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## **ABSTRACT**

Intimate partner violence is a global concern that affects most countries. In South Africa women are mostly affected by intimate partner violence, which often results in physical injuries or mental disorders. The World Health Organization compiled guidelines to combat the problem of intimate partner violence against women with emphasis on screening for intimate partner violence. However, a screening tool to identify intimate partner violence in female patients was absent in the Nelson Mandela Bay Health District, resulting in cases of intimate partner violence being unidentified. The aim of the research study is to determine the knowledge and practices of professional nurses regarding intimate partner violence and to introduce the use of an intimate partner violence screening tool in primary healthcare facilities to assist professional nurses to identify intimate partner violence. The objectives were firstly, to determine the current knowledge and practices utilized by professional nurses to identify intimate partner violence; secondly, to introduce an intimate partner violence screening tool to identify intimate partner violence; thirdly, to evaluate the knowledge of the professional nurses obtained in the educational session and practices post-implementation of the intimate partner violence screening tool.

The researcher conducted a small intervention research study using quantitative, quasi-experimental one group pre-and post-test design. An all-inclusive sample consisting of professional nurses working in primary healthcare facilities in Nelson Mandela Bay Health District was included in the study. The research study was conducted in three phases: Phase one, the pre-test determined the current knowledge and practices of the professional nurses to identify intimate partner violence. Phase two, entailed educational sessions to educate professional nurses that participated in Phase one regarding intimate partner violence and the intimate partner violence screening tool. Phase three, focused on the post-test to evaluate the knowledge of the professional nurses obtained in the educational session and practices post-implementation of the intimate partner violence screening tool. The data was analysed through descriptive and inferential statistics with assistance of the statistician using frequency distribution, central tendency, Chi-square, t-test, Cohens'd and Cramér's V and Cronbach's alpha. The researchers ensured reliability and validity throughout the study. The researcher applied the ethical principles of beneficence, non-maleficence

and autonomy, as well as privacy and confidentiality. Ethical permission was obtained for the study.

The response in the pre-test was ( $n_1=128$ ) and the post-test ( $n_2=63$ ). Most participants were between the ages of 41-50 years in both the pre-test ( $n_1=40$ , 31%) and the post-test ( $n_2=63$ , 33%). The majority of the participants worked more than 15 years as professional nurses ( $n_1=47$ , 37%) in the pre-test findings and 11-15 years ( $n_2=19$ , 30%) in the post-test findings. All the participants were trained in general nursing science in the pre-test ( $n_1=128$ , 100%), as well as post-test ( $n_2=63$ , 100%) and the majority of participants were trained in community nursing science in the pre-test ( $n_1=106$ , 83%) and post-test ( $n_2=58$ , 92%). However, the majority of participants have indicated to receive no informal intimate partner violence training in the pre-test test ( $n_1=11$ , 9%) versus the informal training that most participants received in the post-test ( $n_2=50$ , 79%). Tests scores for knowledge ranged between 29% ( $n_1=37$ ) and 29% ( $n_1=120$ ) in the pre-test and 27% ( $n_2=17$ ) and 94% ( $n_2=59$ ) in the post-test. Test scores for practice ranged between 7% ( $n_1=8$ ) and 46% ( $n_1=59$ ) in the pre-test and 10% ( $n_2=6$ ) and 65% ( $n_2=41$ ) in the post-test. The mean score for knowledge in the pre-test ( $n_1=8,17$ ) and the post-test ( $n_2=8,83$ ) were better than the practice scores in both the pre-test ( $n_1=2,44$ ) and the post-test ( $n_2=2,68$ ). The 20-minutes' educational session made a slight difference regarding the knowledge as statistically a significant difference was found regarding knowledge between the pre-test and post-test (d.f.=,204; Cohens'd 0.29). However, there is still a gap in knowledge among professional nurses regarding IPV in the Nelson Mandela Bay Health District. Further recommendations for practice, research and education were given.

**Keywords:** Intimate partner violence, professional nurses, women, screening tool, primary health care facilities, knowledge, practices

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## **LIST OF ABBREVIATIONS**

<b>IPV</b>	INTIMATE PARTNER VIOLENCE
<b>NMBHD</b>	NELSON MANDELA BAY HEALTH DISTRICT
<b>PHCF</b>	PRIMARY HEALTH CARE FACILITIES
<b>PNS</b>	PROFESSIONAL NURSES
<b>WHO</b>	WORLD HEALTH ORGANIZATION

## **CHAPTER ONE**

### **OVERVIEW OF THE STUDY**

#### **1.1 INTRODUCTION**

The overview of the research study aims to give the reader a brief understanding of the research problem, as well as the content of the study (Brink, van der Walt & van Rensburg, 2013:199). Intimate partner violence (IPV) is a worldwide phenomenon that affects both men and women (Hines & Douglas, 2011:122). Women are mostly affected by this phenomenon with high prevalence in both first and third world countries. The World Health Organization's (WHO) (2013a:38) statistics indicate that one out of three women still fall victim to IPV. South African women are also affected by this problem. However, identifying IPV at grass roots level in primary healthcare facilities (PHCF) remains a concern as IPV victims are often undiagnosed. Although screening for violence can be carried out in several settings including hospitals, emergency departments and PHCF. PHCF frequently are the first to be reached by health care consumers and has the potential to provide diagnosis, early intervention and support for women at risk of IPV. This research study focused on IPV against women and women exposed to IPV are referred to as female IPV victims due to the nature of the violence.

Chapter One gives the reader a brief background of IPV, the problem statement, the research question, the aim and objectives of the research study, the clarification of concepts used, the theoretical framework, namely complexity theory, as well as the research design and methodology and pilot study. The chapter also includes discussions of concepts such as reliability and validity of the study, ethical considerations, the dissemination of the results of the study and the outline of the chapters.

#### **1.2 BACKGROUND**

As previously stated, IPV is a global concern that affects both women in developed and underdeveloped countries. Globally, thirty percent of women experienced IPV at least once in their lifetime, which is mostly physical or sexual in nature. A total of forty-two percent of these women suffered injuries because of IPV (WHO, 2013a:38).

During 2016, 21% of women in South Africa experienced IPV (Department of Health, 2017:54). A total of 5.6% of female IPV victims died during 2009 because of IPV (Abrahams, Mathews, Martin, Lombard & Jewkes, 2013:3). Exposure to IPV in the long-term might cause mental health problems to female IPV victims (Devries, Mak, Bacchus, Child, Falder, Petzold, Astbury & Watts, 2013:1442). These mental health problems may include symptoms associated with depression and suicidal tendencies, as well as anxiety and post-traumatic stress disorder (Jina, Jewkes, Hoffman, Dunkle, Nduna & Shai, 2012:874; Shamu, Abrahams, Temmerman, Musekiwa & Zarowsky, 2011: 17591; Joyner & Mash, 2015:529). Female IPV victims are undiagnosed and untreated for mental health problems and may turn to risky behaviour such as alcohol and substance abuse (Jina, *et al.*, 2012:874; Gass, Stein, Williams & Seedat, 2010:583).

The problem of IPV is hampered by stigmatization. Therefore, female IPV victims do not usually disclose that they are victims of IPV (Pratt-Eriksson, Dahlborg-Lyckhage, Lind, Sundberg & Bergbom, 2015:552; Joyner & Mash, 2012a:400). Less than 10% of female IPV victims are identified at PHCF in Western Cape Province, South Africa due to lack of screening (Joyner & Mash, 2012a:400). Experts on the topic of IPV, agree that South Africa is ready to adopt and implement WHO's guidelines to combat this public health concern, starting at primary healthcare level (Joyner, 2013:26; Mokwena & Adeoti, 2014:319). WHO's guidelines indicated that PHCF should focus on women-centred care programmes that include screening for the identification of IPV (WHO, 2013b:17).

IPV screening tools proved to be successfully implemented in countries such as both Sweden and the United States of America (Pratt-Eriksson, *et al.*, 2015: 552; Iverson, King, Resick, Megan, Kimerling & Vogt, 2013: 1290). In South Africa, the notion is that an IPV screening tool must be implemented in PHCF. In provinces such as the Western Cape and Mpumalanga research was conducted on the implementation of an IPV screening tool to encourage female IPV victims to disclose being abused. More IPV victims were identified with the screening tool (Joyner & Mash, 2012a:400; Joyner, 2009:266; Matseke, Peltzer & Habil, 2013:43).

At the time of this study no studies were conducted on the implementation of an IPV screening tool to identify female IPV victims in PHCF in the Nelson Mandela Bay



Health District (NMBHD) of the Eastern Cape Province. With this study, the researcher aims to contribute to the identification of IPV in women in the NMBHD through the introduction of an IPV screening tool. More information regarding IPV will be given provided in Chapter Two.

### **1.3 PROBLEM STATEMENT**

Thirty-six percent (36%) of women in countries in Africa experienced IPV during their lifetime (WHO, 2013a:17). IPV is still an underestimated and mostly private topic to most of the communities in South Africa (Joyner & Mash, 2012a:400). Statistics shown that one in five women experienced IPV in South Africa (Department of Health, 2017:54). In addition, only a minority of IPV cases, 11 out of 114 records investigated showed that IPV was identified in PHCF (Joyner & Mash, 2012a:400). This public health concern needs to be address at primary level by professional nurses (PNS) (Joyner, 2013:26).

During her career as a professional nurse in the NMBHD, the researcher observed that most women visiting the PHCF came for the treatment of minor ailments such as headache, abdominal pains and backaches. Although some of the symptoms may well have been related to IPV, no further enquiry was made by PNS. The treatment focused on relieving of the symptoms; hence pharmacological treatment was given. Currently there is limited evidence available on the implementation of screening tools to identify and refer IPV victims for effective management of IPV at PHCF in the NMBHD. Also, knowledge and practices deficits may contribute to PNS inability to screen, and identify IPV affected women. Consequently, the health care needs of women experiencing IPV are unmet. This leads the researcher to ask the following research question:

### **1.4 RESEARCH QUESTION**

How will an IPV screening tool assist professional nurses to identify IPV in primary health care facilities in the Nelson Mandela Bay Health District of the Eastern Cape Province?

## **1.5 THE RESEARCH AIM**

The aim of the study is to determine the knowledge and practices of PNS regarding IPV and to introduce the use of an IPV screening tool in PHCF to assist PNS to identify IPV.

## **1.6 RESEARCH OBJECTIVES**

The research objectives of this study are:

- To determine the current knowledge and practices of PNS to identify IPV
- To introduce an IPV screening tool that focuses on the identification of IPV and
- To evaluate the knowledge of the PNS obtained in the educational session and the practices post-implementation of the IPV screening tool.

## **1.7 CONCEPT CLARIFICATION**

In a research study, the researcher must explain the main concepts used in the study. These concepts form the foundation of the study (De Vos & Strydom, 2014a:29). It is important that the researcher clarify the main concepts used in this research study as follows.

### **Intimate partner violence (IPV)**

IPV refers to any form of physical, sexual, emotional and financial abuse to a partner (The Domestic Violence Act 116 of 1998:2). Physical abuse refers to the use of physical force on a partner resulting in injuries. Sexual abuse refers to forced sex on a partner which may result in physical injuries. Emotional abuse refers to psychological abuse or the effect of abuse on a partner (WHO, 2013a:9). Financial abuse refers to withholding of resources such as money, medical assistance and education from the partner (The Domestic Violence Act 116 of 1998:2). In this study, IPV includes physical, sexual, emotional and financial abuse against women.

### **Professional nurses (PNS)**

Professional nurses are people who are trained, qualified and competent to practice independently as nurses; render comprehensive nursing care and accept responsibility as well as accountability for such practice (Nursing Act, 2005:30). PNS

forms part of the health care providers, caring for sick individuals in the health care environment (Torrens, 2010:6; WHO, 2006:1; WHO, 2008:3). PNS renders a primary healthcare service to patients (Peate, 2012:28). In this study, professional nurses include nurses working in PHCF that render a comprehensive nursing service to communities in the NMBHD.

### **IPV screening tool**

A screening tool refers to a means of conducting tests on a huge number of the people to identify diseases and conditions (Weller, 2014:369). IPV screening tool refers to the instrument used to identify female IPV victims in PHCF. The IPV screening tools enable PNS by means of specific questions to ensure female IPV victims is identified (Joyner, 2009:359). In this study, an IPV screening tool refers to the instrument that was implemented by PNS to identify IPV.

### **Primary healthcare facilities (PHCF)**

PHCF includes clinics and community health centres that render a comprehensive range of preventive, promotive, curative and rehabilitative services on primary level of the health system. Clinics are small primary healthcare facilities that focus mostly on preventive, promotive and curative services rendered by PNS. Clinics are open eight hours per day. Clinics refer patients to community health centres, whilst community health centres render a twenty-four-hour service that includes preventive, promotive, curative and rehabilitative services. These services are rendered by PNS, psychologists, and doctors (Department of Health, 1997:9; Dookie & Singh, 2012:70). In this study, PHCF includes clinics and community health centres in the NMBHD where the study will be conducted.

### **Knowledge**

Knowledge refers to theory learned on a specific topic through education (Gottschalk-Mazouz, 2008:221; Meyer & Van Niekerk, 2011:83). Knowledge can also be gained through experiences (Gottschalk-Mazouz' 2008:218; Schank & Abelson, 2014:2). Knowledge enables the nurse to conduct the practical element of nursing (Peate, 2012:19). In this study, knowledge refers to the information that the PN utilise to identify IPV.

## **Practices**

Practices refer to the manner in which institutions conduct skills based on theoretical information (Peate, 2012:19). Years of experiences in a specific field will influence practices. Practices are based on theory that nurses obtained through training (Peate, 2012:19). In this study, practices refer to the method that PNS use to identify IPV.

### **1.8 THEORETICAL FRAMEWORK**

The theoretical framework is used by the researcher to construct the research study. The theoretical framework is the lens through which the researcher sees the research problem. It is a guide used to understand and investigate the researcher's perception of the research study (Brink, *et al.*, 2013:20; De Vos & Strydom, 2014a:38). The researcher used complexity theory in this research study.

Complexity theory focuses on systems. For this reason, the researcher must have a comprehensive understanding of a complex adaptive system (Norberg & Cumming, 2008:246). A large system consists of smaller systems, components or sub-systems that are linked to each other. These smaller systems link into the larger system (Norberg & Cumming, 2008:246; Kannampallil, Schauer, Cohen & Patel, 2011:945). In addition, the smaller systems or components are tied together through the changes that occur within them (Norberg & Cumming, 2008:280).

Systems are complex in nature and comprised of certain properties. Complexity occurs because of the interconnective relationships between the smaller systems. The smaller systems are bound by their relationship to one another. That results in continuous interaction on a regular basis with each other which includes information sharing sessions. The relationships between the smaller systems are beneficial for both the small systems and the large system. Complex systems are changing on a regular basis in the small systems to ensure an effect on the large system (Cilliers, 2002:3).

Complexity theory focuses on improving the system through observation and understanding of the system as a whole (Cilliers, 2002:3). This includes learning about people and understanding people. Furthermore, complexity theory allows the researcher to conduct research on topics specifically linked to primary care settings

(Sturmborg, Martin & Katerndahl, 2014:73). The Plexus Summit Report (2003:2) emphasised the link between the variables when using complexity theory. The link can be between people, the environment, the healthcare system and healthcare personnel.

Although complexity theory is mostly used in mathematics and computer science, nowadays complexity theory is also used in healthcare research because of its ability to improve the healthcare system. Furthermore, complexity theory also focuses on the connection of similarities in the systems (The Health Foundation, 2010:6). Hence, the systems are forever changing to adapt to their changing environment (The Health Foundation, 2010:6; Curtis & Riva, 2010:216).

The main aim of complexity theory is to positively change the systems and to define the system with or without an explanation (Curtis & Riva, 2010:219). The changes in the system can firstly happen *after* a specific event occurs. The focus here will be to positively change the outcome of the event. Secondly, changes can happen *before* a specific event occurs. The aim will then be to prevent the changes in the system (Norberg & Cumming, 2008:280). Complexity theory in healthcare research acknowledges that communities experience a knowledge deficit regarding the functioning of the small parts of the system (Curtis & Riva, 2010:216). Therefore, complexity theory allows the changes to occur in the form of education (Norberg & Cumming, 2008:2).

In complexity theory, it is best to first study the large system and then identify the needs in the system. Thereafter, small interventions are implemented in the small systems that in their turn affect the large system; by doing so, bringing changes to the large system (Byrne & Callaghan, 2014:3). The large system determines one objective that should be achieved. All the smaller systems then work to achieve this objective. Once the smaller systems have achieved the objective, the larger system meets its objective (Plsek & Wilson, 2001:746). Furthermore, it is important that all the changes that occur in a system should be documented. The documents and records should be safely stored for future references (Cilliers, 2002: 11).

In this study, complexity theory was applied in the following way:

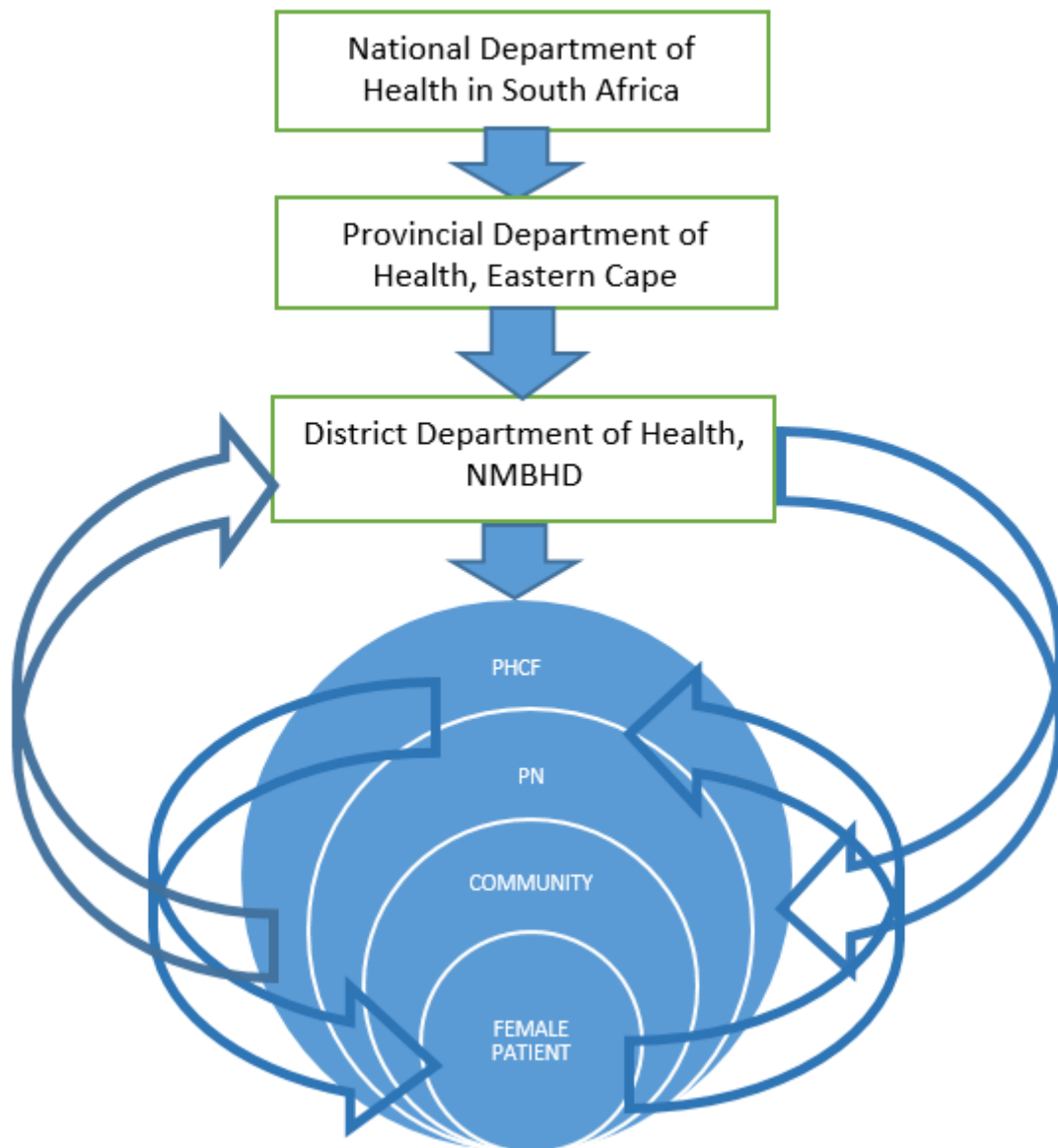
The health care system of South Africa is managed on three different levels, namely national level, provincial level and district level. Whilst the National Department of Health (large system) in South Africa is responsible for compiling the acts and guidelines for the health care system, the Provincial Departments of Health (large system) are responsible for managing the health care systems in the different provinces. On the other hand, the District Departments of Health (large system) are responsible for the implementation of the guidelines and rendering the health care services to the communities in South Africa (Dennill, 2012:207; Mtembu, 2013:32; Van Rensburg & Engelbrecht, 2012:144). Therefore, PHCFs (small system) are managed by District Departments of Health (Dennill, 2012:60). The communities (small system) are also involved in the decision-making processes that guide the services rendered by PHCF such as when new PNS are interviewed a community representative forms part of the interview panel. The services rendered by PHCF focus on the empowering of the communities and include educational programmes, as well as curative, rehabilitative and preventative services (Dennill, 2012:4).

PNS are viewed as the interconnection between the large and the smaller systems as outlined above. Therefore, PNS can influence the large system and be the key role players in using complexity theory in healthcare research. However, PNS will require the necessary resources to introduce the changes to the systems (Clancy & Delaney, 2005:193). PNS form part of the micro level staff in the NMHD and can introduce an IPV screening tool to identify IPV. PNS are also the connection between the large system and the smaller systems which include the communities.

This study is conducted in the healthcare system of the NMBHD. The smaller systems represent PHCF which include the 53 clinics and community health centres, as well as the communities. PHCF served the communities by rendering a healthcare service to them. The small systems are interconnected to each other. The healthcare service is mainly rendered by PNS and focused on preventative, curative, and rehabilitative services. Most members of the community are successfully treated on this level and do not have to be referred to hospitals. The small systems render the primary healthcare services to the various communities within the NMBHD. The researcher introduced small changes in the form of an IPV screening tool in the small systems, the PHCF. PNS formed part of the communities and worked in PHCF in the

communities. PNS were trained on the topic of IPV to increase their knowledge and practices to identify IPV so that more female IPV victims can be identified, referred and properly managed in the NMBHD healthcare system.

Figure 1.1 below depicts a graphical image of complexity theory applied to this research study:



**Figure 1.1: Complexity theory application to the research study**

## **1.9 RESEARCH DESIGN AND METHODOLOGY**

The research design refers to the systematic method that is used to produce the end results of the research study (Fouché, Delport & de Vos, 2014:143). The research

design is also called the blueprint of the research and entails a detailed plan that researchers developed and followed (Babbie & Mouton, 2009:75; Schmidt & Brown, 2009:123). The research design includes sampling, data collection and data analysis (Fouché, *et al.*, 2014:143). In this study, the researcher used a small intervention study utilizing a quantitative, quasi-experimental one group pre-test post-test design. A description and application of this design is provided in Chapter Three. Population and sampling, data collection and data analysis are described briefly below.

### **1.9.1 Population and sampling**

The population is the specific target group that can participate in the research study (Grove, Burns & Gray, 2013:351). The population includes all the people in the field that can relate to (Strydom, 2014a:223) and can participate in the research study (Maree & Pietersen, 2016:164). The sample of a research study refers to the specific selected audience in the population that participated in the research study (Brink, *et al.*, 2013:135; Moule & Goodman, 2012:266). The sample size is the specific number of the participants that participated in the study (Neale, 2009:130).

In this research study, the population included PNS working in PHCF NMBHD in the Eastern Cape Province. All-inclusive sampling was used as the sample was small and the researcher wanted to give all the participants the opportunity to participate in the research study (Grove, *et al.*, 2013:362). (See Chapter Three for a more detailed description).

### **1.9.2 Data collection**

Data collection refers to the gathering of the information to enable the researcher to answer the research question. A quantitative research design enabled the researcher to collect the data using various methods (Brink, *et al.*, 2013:148). One of these data collection methods includes the use of a questionnaire (Brink, *et al.*, 2013:148; Delport & Roestenburg, 2014:186; Maree & Pietersen, 2016:176). The questionnaire is developed in such a way that it enables the researcher to collect the specific data needed for the research study. It enabled the researcher to reach the research objectives (Brink, *et al.*, 2013:154).



When using a quantitative research design, questionnaires are the preferred instrument in healthcare research. Furthermore, questionnaires are standardized which enhances anonymity (Moule & Goodman, 2012:302). The questionnaire can be completed through a self-administered technique (Polit & Beck, 2009:312; Delpont & Roestenburg, 2014:188) or group-administration technique (Delpont & Roestenburg, 2014:189; Maree & Pietersen, 2016:176). When using the self-administered technique, the participants completed the questionnaire alone (Delpont & Roestenburg, 2014:188); whereas with the group-administration technique all the participants completed the questionnaire as a group in one place (Delpont & Roestenburg, 2014:189; Maree & Pietersen, 2016:176).

This research study comprises three phases of which the data collection process was conducted in phase one and phase three of the study using self-administered structured questionnaires. The data collection process of the research design is described in more detail and applied in Chapter Three.

### **1.9.3 Data analysis**

Quantitative data can be analysed by using statistics (Babbie, 2013:25), namely descriptive and inferential statistics (Brink *et al.*, 2013:179). Descriptive statistics provide a detailed overview of all the data gathered in the research study (Brink *et al.*, 2013:180). On the other hand, inferential statistics concentrate on reporting the estimation of population parameters, hypothesis tests and modelling (Babbie, 2013:25).

In this study, the researcher requested the assistance of a statistician from the Nelson Mandela University to analyse the data of phase one and phase three using descriptive and inferential statistics. More detail about the application of the data analysis will be given in Chapter Three, whereas the results will be discussed in Chapter Four.

### **1.10 PILOT STUDY**

A pilot study is a smaller replica of the main research study with a different group of participants (Brink *et al.*, 2013:174). The first purpose of the pilot study was to test the data collection instruments used in the main study (Brink *et al.*, 2013:174; David &

Sutton, 2011:473). The second purpose of the pilot study was to evaluate whether it was possible for the researcher to conduct the research study (Brink *et al.*, 2013:174; Strydom, 2014b:237).

In this study, the researcher conducted a pilot study to evaluate the pre-test and post-test questionnaire as well as the feasibility of the study. A detailed description of the application of the pilot study will be discussed in Chapter Three.

### **1.11 RELIABILITY AND VALIDITY**

To ensure rigour of the research study, the reliability and validity was an important factor in quantitative research. By ensuring reliability and validity, the researcher excluded the risk of bias (Brink, *et al.*, 2013:165). In this study, the researcher ensured that a high quality of research is conducted. More details regarding how reliability and validity were ensured are given in Chapter Three.

### **1.12 ETHICAL CONSIDERATIONS**

The researcher applied four of the Belmont principles to ensure that the research study was fair to all the participants in the research study. The four ethical principles include beneficence, non-maleficence, autonomy and justice. The researcher also gained ethical permission to conduct the research study (Brink, *et al.*, 2013:35). A description and the application of the ethical principles, privacy and confidentiality, as well as gaining ethical permission, are provided in Chapter Three.

### **1.13 DISSEMINATION OF THE RESULTS**

Research is incomplete if the results are not communicated to the relevant people and people that show an interest in the research topic (Brink, *et al.*, 2013:58). The researcher disseminated the data by compiling a research report of the research study that will be available in the library of the Nelson Mandela University. The researcher will also submit an article on the study to a peer reviewed accredited journal and present the research findings at a relevant conference. Furthermore, the researcher will communicate the findings to the Department of Health, Eastern Cape Province, and to the PNS of all the PHCF in the NMBHD. The screening tool to identify IPV will

be shared among PNS in PHCF outside the NMBHD in the Eastern Cape Province that were not included in the study.

#### **1.14 CHAPTER OUTLINE**

The planned chapter is outlined in Table 1.1 is as follows:

**Table 1.1: Chapter outline**

<b>Chapters</b>	<b>Theme</b>
Chapter One	Overview of the study
Chapter Two	Literature review
Chapter Three	Research design and methodology
Chapter Four	Data analysis and findings
Chapter Five	Conclusions, limitations and recommendations

#### **1.15 SUMMARY OF THE CHAPTER**

Chapter One proposed a study to determine the knowledge and practices of PNS regarding IPV and to introduce an IPV screening tool in PHCF to assist PNS to identify IPV. The brief discussion gave the reader an indication of the background of IPV, the problem statement, the research question, the aim and objectives of the research study, the clarification of concepts, the theoretical framework, research design and methodology, pilot study, reliability and validity of the study, ethical considerations, and the dissemination of the results of the study, as well as the outline of the chapters. The researcher wants to contribute to the discourse regarding the identification of IPV in the NMBHD. In addition, the researcher has outlined the dissemination, as well as a chapter outline of the research study. Chapter Two will discuss the literature review of the research study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

In Chapter One, the researcher gave an overview of the research study. In Chapter Two, the researcher discusses the literature review. A literature review provides the background to the research topic to the reader and discusses all the relevant information pertaining to the research topic. The information in the literature review was gathered from research articles and books which discussed previous studies' research conducted on the same topic. Furthermore, the literature review enables researchers to construct an argument, form opinions, identify shortcomings and draw conclusions regarding the research topic. To ensure this it was important that researchers wrote the literature review in a systematic order (Brink, *et al.*, 2013:71).

This chapter aims at providing a background to the study's topic, namely IPV. Further, the researcher used most sections of the literature review to develop the pre-and post-test questionnaire. Sections such as statistics regarding IPV, as well as IPV and patriarchal norms, were not used in the development of the pre-and post-test questionnaire. However, the researcher added these sections to give the reader more information regarding IPV. The following is discussed in this chapter; the definition of IPV, statistics regarding IPV, IPV and patriarchal norms, the physical effect of IPV on female victims, the mental effect of IPV on female victims, disclosure of IPV, screening for IPV in PHCF, the knowledge of PNS regarding IPV, as well as referrals of female IPV victims.

#### **2.2 DESCRIBING THE TERM IPV**

Various entities across the world used a variety of terms and definitions when referring to IPV. In this section the researcher discussed a comprehensive view of the various definitions of IPV. Colombini, Mayhew, Ali, Shuib and Watts (2013:8) stated that PNS rarely thought of defining IPV. Most PNS are of the view that IPV entails only physical and emotional abuse. Only a few PNS view sexual abuse as part of IPV.

The discourse around IPV started from the early 1970s. At the time, the term wife battering was used to describe IPV as mostly women were affected (Nicolaidis & Paranjape, 2009: 22). Other terms include domestic violence, battering, a coercive pattern of physical violence and intimidation or control by the male partner (Kelly & Johnson, 2008:478).

Thirty years of research mainly by social and feminist researchers on the topic of IPV, identified various forms of IPV (Johnson, 2008:12; Tanha, Beck, Figueredo & Raghavan, 2010:16). This includes the most-well known typology called Johnson's typology. Johnson's typology describes the different types of IPV. Johnson's typology categorises IPV in four main categories, namely, coercive controlling violence, violent resistance, situational couple violence and separation-instigated violence (Kelly & Johnson, 2008:479; Johnson, 2008:26).

Coercive controlling violence is also referred to as intimate terrorism (Johnson, 2008:26). In this form of abuse two main characteristics, namely, violence and control, are involved. It occurs when one partner absolutely controls all the activities and behaviour of the other partner. Furthermore, coercive controlling violence includes applying of physical violence, as well as bullying and mocking the other partner (Johnson, 2008:26; Kelly & Johnson, 2008:479). Research found that mostly women are victims of coercive controlling violence. The male partner is the perpetrator who applies this form of abuse on regular occasions to female IPV victims. The effect of this form of abuse always results in physical injuries, as well as mental health related problems (Johnson, Leone & Xu, 2014:201).

A second form of abuse, according to the Johnson's typology, is violent resistance. This form of IPV occurs when female IPV victims respond with violence when the male perpetrator abuses them. Female IPV victims only used the violence out of necessity to defend themselves. Therefore, violent resistance is linked to a female IPV victim's desire to protect herself from the abuse partner (Kelly & Johnson, 2008:479).

Johnson's typology thirdly identified situational couple violence as another type of IPV. This form of IPV occurs after a specific event occurs or after a disagreement where only one of the partners turns to violence. Situational couple violence may occur as a once off event only or on a regular basis (Johnson, 2008:26). Furthermore, situational

couple violence is the type of IPV that has the highest prevalence rate between intimate partners (Johnson, *et al.*, 2014:191).

The last and fourth form of abuse, according to Johnson's typology, is called separation-instigated violence. This form of IPV occurs for the first time in the relationship when the partners decided to go their own ways. The partners decide to separate for various reasons and as a reaction to their decision both partners turn to violent behaviour (Kelly & Johnson, 2008:479).

Some researchers differ from the Johnson typology in stating that there is a difference between the abuse that adults and adolescents commit. Hence, the researchers categorise IPV between adolescents into five different typologies, namely:

- Violent control – this form of IPV occurs when both intimate partners in a relationship display controlling behaviour towards each other. However, one of the two intimate partners is more dominant.
- Unilateral violent control – this form of IPV occurs when only one of the intimate partners applies controlling behaviour, whilst the other partner accepts the abuse without defending herself or talking about the abuse.
- Mutual violent control – this form of IPV occurs when both the partners physically abuse each other.
- Unilateral situational violence – this form of IPV occurs when one partner applies controlling behaviour on a regular basis on the other partner. The partner on the receiving end of the abuse does not resist the abuse. Unilateral situational violence is viewed as the most common form of IPV that occurs between adolescents.
- Mutual situated violence - this form of IPV occurs when both partners apply violence on a regular basis. The abuse occurs to communicate their feelings of anger towards the other partner (Messinger, Fry, Rickert, Catalozzi & Davidson, 2014:951).

Other researchers differentiate only between two forms of abuse, namely, physical and non-physical abuse, where physical abuse on the one hand includes physical hurting, or injuring of a partner. Non-physical abuse on the other hand includes emotional and financial abuse (Outlaw, 2009:265).

IPV is defined as four different types of abuse. These types of abuse are physical, sexual and emotional in nature. Physical abuse includes any form of beating, slapping, choking and kicking, as well as threatening a partner with a weapon (WHO, 2013a:9; Stöckl, Devries & Watts, 2015:43). Physical abuse is a behaviour or deed displayed by one partner to another that causes harm or injuries to the partner at the receiving end (WHO, 2012b:7). As for female IPV victims, the definition of physical violence also includes “being held out of balconies and punched into unconsciousness” by the abusive partner (Nittis, Hughes, Gray & Ashton, 2013:689).

The second form of abuse as defined by WHO is sexual abuse (WHO, 2013a:9). Sexual abuse occurs when a partner exercises forced intercourse to the other partner without mutual consent. Sexual abuse is a deed where one partner wants the other partner to participate in sexual activities that she feels uncomfortable with. The reason for this may be because the female is not used to those sexual activities (WHO, 2013a:9; Stöckl, *et al.*, 2015:43). For female IPV victims there is no difference between sexual abuse and being a victim of rape. They reflected in their narratives that the male partner will rape the female partner after accusing the woman of being unfaithful and having an affair with other men (Boonzaier & Van Schalkwyk, 2011: 279).

The third form of abuse, according to WHO, is emotional abuse (WHO, 2013a:9). Emotional abuse refers to bullying and disrespecting of an intimate partner. Emotional abuse also includes controlling with whom, how often and when the partner can interact or visits her/his friends or family (WHO, 2013:9; Stöckl, *et al.*, 2015:43). Furthermore, emotional abuse occurs when one partner takes total control of the family resources. This partner also decides when the other partner can access medical services, as well as further her education (WHO, 2012b:1).

Emotional abuse was firstly perceived by researchers as a minor type of abuse. However, the perception of researchers changed as more research was conducted on various aspects of emotional abuse. Emotional abuse is now perceived as one of the most common causes of mental health disorders (Lagdon, Armour & Stringer, 2014: 24800). Female IPV victims emphasised that emotional abuse is the worst form of abuse that they are exposed to. Female IPV victims stated that the reason for this is that of the devastating effect of this form of abuse as it destroys their inner-self

(Boonzaier & Van Schalkwyk, 2011: 277). In South Africa, emotional abuse is also the most common form of IPV against women (Joyner & Mash, 2011:4).

The fourth form of abuse is financial abuse. Financial abuse occurs when the one partner controls the financial resources of the family. In most cases this will be the male partner (Ali & Naylor, 2013:614; Stöckl, *et al.*, 2015:43). Legislation (South Africa. Domestic Violence Act 116 of 1998:2) includes financial abuse where the male partner refuses to give money to the female partner, refuses to cover the expenses of daily living which includes food and clothing and fails to pay the rent or bond of the household as part of IPV. Financial abuse is the form of abuse which occurs the least in relationships between intimate partners (Outlaw, 2009:266). A study, conducted in California in the United States of America, concluded that most female IPV victims were unemployed and therefore financially dependent on the perpetrator (Kimerling, Alvarez, Pavao, Mack, Smith & Baumrind, 2009:458).

Communities also have their own definition for IPV. The community's definition is often based on the physical proof of the abuse. The physical proof of the abuse includes signs related to facial injuries on female IPV victims such as bruised eyes, facial scars or wounds. Only if the evidence is visible will the community accept that the woman is an IPV victim. Not only has the community their own definition for IPV, but they are also most of the time indirectly responsible for the abuse between the two partners. Female IPV victims report that their partner will physically hurt them because of a misunderstanding between them or verbal disagreement as a direct result of gossip in the community regarding the woman. The man then responds with violent behaviour (Boonzaier & Van Schalkwyk, 2011:274).

Legislation (South Africa. Domestic Violence Act 116 of 1998:2) categorises IPV as part of domestic violence. The Act describes IPV as physical, sexual, emotional and financial abuse. As with the definition of the WHO, the South African definition also includes hurting, threatening, stalking and humiliating the victim; furthermore, stating that IPV includes following female IPV victims and threatening the safety and privacy of victims. IPV may be conducted because of resentment of or to control female IPV victims.



Although one researcher stated that female IPV victims can only be exposed to one type of abuse at a time (Outlaw, 2009:271), research differs on the type of abuse that female IPV victims are mostly exposed to. The WHO (2013a:16) states that women are mostly exposed to physical and sexual abuse. Other researchers differ from the WHO's statement and perceive emotional abuse as the most common form of IPV that women are exposed to (Diez, Escutia, Pacheco, Martinez, Caracena & Contreras, 2009:422; Sprague, Goslings, Hogentoren, De Milliano, Simunovic, Madden & Bhandarim, 2014:127; Iskandar, Braun & Katz, 2015:1225; Outlaw, 2009:266).

### **2.3 STATISTICS REGARDING IPV**

IPV affects women both nationally and internationally (Breiding, Smith, Basile, Walters, Chen & Merrick, 2014:1); the global statistical rate is high (Alhabib, Nur & Jones, 2010:373). Statistics shown that one out of five women are a victim to IPV (Diez, *et al.*, 2009:422). In the United States of America, a total of forty-four percent (44%) of woman are exposed to at least one form of IPV (Breiding, *et al.*, 2014:1). In first world countries, such as Sweden, it is estimated that 23.6% of women are exposed to emotional abuse, whilst 14.3% of women are exposed to physical abuse and 9.2% of women are exposed to sexual abuse (Pratt-Eriksson, *et al.*, 2015:554). Female psychiatric patients are not excluded from this phenomenon. These patients are more vulnerable because of their condition and viewed as easy targets for IPV (Oram, Trevillion, Feder & Howard, 2013:97; Howard, Trevillion & Agnes-Davies, 2010:529).

In Africa, the statistics of IPV are concerning high as well. It is estimated that a total of 25.7 - 48% of African women are victims of IPV. In countries, such as Zambia and Kenya the figures of IPV vary between 37% - 48% (WHO, 2013a:16; Roman & Frantz, 2013:260). As for Ethiopia, 70.9% of the country's women are exposed to some form of IPV (Devries, Watts, Yoshihama, Kiss, Schraider, Deyessa, Heise, Durand, Mbwambo, Jansen, Berhane, Ellsberg & Garcia-Morena, 2011:84).

In South Africa, the IPV prevalence is not much different. A study conducted in Johannesburg indicated that 30 - 31% of South African women are exposed to IPV (Gass, *et al.*, 2010:583; Sprague, Woollett, Parpart, Hatcher, Sommers, Brown & Black, 2016:173). A study conducted in the Western Cape revealed that 33% of women in urban areas and 66.6% of women in the rural areas in South Africa indicated

that they were exposed to IPV after specifically asked by PNS (Joyner & Mash, 2012b:2). Nurses themselves are also female IPV victims (Sprague, *et al.*, 2016:173).

Although most of the women exposed to IPV are between the ages of 40-44 years (WHO, 2013a:16), adolescents and young women cannot escape this phenomenon (Stöckl, March, Pallito & Garcia-Moreno, 2014:761). In countries such as Namibia, Bangladesh, Thailand and Peru, up to 57% of adolescents and young women are female IPV victims (Stöckl, *et al.*, 2014:761). As from an early age of 15 years, adolescents are exposed to physical and sexual abuse (WHO, 2013a:16; Stöckl, *et al.*, 2014:752). Statistics in Kenya indicated that women between the ages of 18-24 years old are mostly victims of emotional abuse. This age group of women is also exposed to sexual abuse (Undie, Maternowska, Mak'anyengo & Askew, 2016:288).

In South Africa, an alarming 13.8% of high school learners in grade eight reported that they are victims of physical abuse committed by an intimate partner (Russel, Cupp, Jewkes, Gevers, Mathews, LeFleur-Bellerose & Small, 2014:292; Shamu, Gevers, Mahlangu, Shai, Chirwa & Jewkes, 2016:25). The average age of these girls is 13 years (Department of Education, 2009:13). Another study also conducted in South Africa, indicated that 86% of women between the ages of 16-19 years were IPV victims. A total of 80% were victims of physical abuse and 67% were victims of emotional abuse (Zembe, Townsend, Thorson, Silberschmidt & Ekstrom, 2015:6).

## **2.4 IPV AND PATRIARCHAL NORMS**

Cultural beliefs influence the views of women regarding IPV (Carretta, 2008:34). The high prevalence of IPV in Africa is mostly because of discrimination against women. The discrimination is endorsed by the silent voice of the woman originated by patriarchal norms (Olayanju, Naguib, Nguyen, Bali & Vung, 2013:109). In certain cultural groups patriarchal traditional norms expect women to be respectful and dutiful to their male partner or husband. Failure to do so often results in some form of IPV (Tenkorang, Owusu, Yeboah & Bannerman, 2013:776).

In South Africa, the community's perception of IPV is influenced by their traditional norms and values. The traditional norms of various cultures result in the female IPV accepting the abuse as part of the relationship between herself and her partner (Shefer, Crawford, Strebel, Simbayi, Dwadwa-Henda, Cloete, Kaufman & Kalichman,

2008:164). In some cultural groups the husband and his family pay a prize called “lobola” to the bride’s family. “Lobola” is mostly paid in monetary form; therefore the husband perceives his wife as his property. This belief seems to give the husband permission to reprimand his wife as he deems fit if she is in any way disobedient (Dworkin, Colvin, Hatcher & Peacock, 2012:107). African women believe the reason they are exposed to IPV is directly linked to this patriarchal traditional norm of “lobola” (Thupayagale-Tshweneagae & Seloilwe, 2010:42).

Further, the difference in role performance between women and men makes provision for IPV to occur. The man is traditionally perceived as the head of the household and therefore he claims the title of the dominant party. The woman is perceived as the submissive party. These role differences result in the woman having to obey the man at all times. Failure to obey the man will result in some form of punishment. The punishment includes a form of either physical abuse, emotional abuse or sexual abuse or both. The punishment can also include financial abuse, where the man withholds money from the woman. As a result, the woman is unable to supply in her needs or the needs of her children (Shefer, *et al.*, 2008:162).

Patriarchal traditional norms also influence the woman’s acceptance of IPV, especially sexual abuse. The sexual relationship between partners is perceived as a normal part of the relationship regardless of how this occurs. Hence, the woman views forced intercourse as normal and not as sexual abuse (Stockman, Lucea & Campbell, 2013:844).

Educated women’s experiences of IPV differ from those of women with limited education levels. The more educated the woman is in some African countries the less likely she is exposed to IPV. This phenomenon can be directly linked to their knowledge regarding IPV, as well as resources they have to obtain the knowledge. These resources include books or internet resources (Tenkorang *et al.*, 2013:776). Furthermore, studies prove that the occurrence of IPV is significantly lower in relationships where the female partner challenges the patriarchal traditional norms and ideologies (Russel, Cupp, Jewkes, Gevers, Mathews, LeFleur-Bellerose & Small, 2013:294).

## 2.5 THE PHYSICAL EFFECT OF IPV ON FEMALE VICTIMS

IPV has a negative effect on the physical, reproductive and sexual health of female IPV victims (Stöckl, *et al.*, 2015:43). These effects can be long term as they can impact on their lives forever (Ouellet-Morin, Fisher, York-Smith, Fincham-Campbell, Moffitt & Arseneault, 2015:321). IPV can also result in the death of female IPV victims (Carretta, 2008:34).

As stated, IPV affects the physical health of the victims. Female IPV victims experience more problems with their physical health than women that are not exposed to IPV (Dillon, Hussain, Loxton & Rahman, 2013:11). The physical health problems women encounter vary from fractures and lacerations to gynaecological conditions (Wong & Mellor, 2014:177), as well as bruises (Stöckl & Penhale, 2015:3100). Physical injuries are mostly found on the facial and neck areas of female IPV victims as the abuser targets the exposed area of the victim first (WHO, 2013a:25; Saddki, Suhaimi & Daud, 2010:271). The abuser is aware that women view their faces as one of the important parts of their body and therefore take great care of it. Hence, they injure the female IPV victim's face to humiliate her further (Saddki, *et al.*, 2010:271). Abdominal symptoms such as pain, weight loss or weight gain can be associated with emotional abuse (Stöckl & Penhale, 2015:3103). A female IPV victim who is exposed to physical abuse, often has injuries on the musculo-skeletal area and private parts of the victim (WHO, 2013a:25). Severe forms of head injuries because of physical abuse may result in memory loss (Wong & Mellor, 2014:177). More female IPV victims require surgical procedures than women not exposed to IPV because of physical abuse (Ruiz-Pérez, Plazaola-Castaño, DelRio-Lozano, 2007:442).

Non-disclosure of IPV results in elevated stress-levels of female IPV victims. This may lead to somatic symptoms such as headaches (Varma, Handra, Thomas & Carey, 2007:233; Cripe, Sanchez, Gelaye, Sanchez & Williams, 2011:215). The increased stress levels may also lead to the development of cardiovascular diseases such as angina and myocardial infarctions, as well as strokes (Breiding, Black & Ryan, 2008: 542; Hinkle & Cheever, 2014:863). Female IPV victims are also at risk of developing coronary heart diseases (Vives-Cases, Ruiz-Cantero, Escribà-Agüir & Miralles, 2010:16). The "South African Guidelines for Primary Care" explains symptoms of angina, myocardial infarction and strokes in female IPV victims which might present

as blurred vision, dizziness, headaches, paralysis on one side of the body and speech problems (Department of Health, 2016:90).

The high stress levels can also increase the peripheral blood pressure of female IPV victims that leads to hypertension (Mason, Wright, Hibert, Spiegelman, Forman & Rich-Edwards, 2012:564; Vives-Cases, *et al.*, 2010:16). The development of hypertension because of IPV is mostly linked to emotional abuse (Mason, *et al.*, 2012: 564). As hypertension presents normally without any symptoms. However, symptoms related to the retina of the eyes, angina, myocardial infarction as well as strokes should be warning signs of hypertension (Hinkle & Cheever, 2014:863). The “South African Guidelines for Primary Care” explained symptoms of angina, myocardial infarction and strokes female IPV victims might presents such as blurred vision, dizziness, headaches, paralysis on own side of the body, speech problems (Department of Health, 2016:90).

The effect of sexual abuse may lead to physical injuries of the private parts, as well as sexual infections (WHO, 2013a:21; Department of Health, 2016:90; Dillon, *et al.*, 2013:11; Durevall & Lindskog, 2015:40; Stockman, *et al.*, 2013:844; Wong & Mellor, 2014:177). In South Africa, researchers found a strong link between IPV and newly diagnosed sexually transmitted infections and Human Immune Virus infections (Jewkes, Dunkle, Nduna & Shai, 2010:64).

## **2.6 THE MENTAL EFFECT OF IPV ON FEMALE VICTIMS**

IPV also has a profound effect on the mental health of the victim. Hence, the ideology that all women diagnosed with mental health problems should be screened for IPV (Ouellet-Morin, *et al.*, 2015:323). Some mental health disorders occur as a direct consequence of IPV (Lagdon, *et al.*, 2014: 24800; Dillon, *et al.*, 2013:4). Female IPV victims may be diagnosed with mental health illnesses such as alcohol abuse, depression, suicidal ideation, anxiety and post-traumatic stress disorder (WHO, 2013a:21; Dillon, *et al.*, 2013:11).

The most common form of mental health problems among female IPV victims is depression (Beydoun, Beydoun, Kaufman, Lo & Zonderman, 2012:973; Ouellet-Morin, *et al.*, 2015:321; Dillon, *et al.*, 2013:4) and are diagnosed in almost 95% of female IPV victims (Ouellet-Morin, *et al.*, 2015:319). Fifty-four percent (54%) of female IPV victims

(Chandra, Satyanarayana & Carey, 2009:206) present with symptoms of depression such as sleep pattern disturbances that may be insomnia or hypersomnia (Chandra, *et al.*, 2009:206; Dillon, *et al.*, 2013:11; Wong & Mellor, 2014:177; Kneisl & Trigoboff, 2013:363). Another characteristic of depression that is commonly found in female IPV victims is the loss of appetite which can become so severe that it results in starvation (Diez, *et al.*, 2009:423; Kneisl & Trigoboff, 2013:363).

Furthermore, 92% of female IPV victims reported that they no longer desire to conduct activities that usually gave them pleasure (Martin, Neighbors & Griffith, 2013:1104). These activities include extramural activities such as sport and art, as well as sexual activities (Kneisl & Trigoboff, 2013:363). Other symptoms of depression include lack of energy, tiredness, agitation, suicidal ideation (Kneisl & Trigoboff, 2013:363; Department of Health, 2016:90), as well as feelings of helplessness and sadness (Jarvis, 2014:360; Department of Health, 2016:90). Suicidal ideation can be so severe, that female IPV victims experience these ideations whilst visiting PHCF (Devries, Watts, Yoshihama, Kiss, Schraider, Deyessa, Heise, Durand, Mbwambo, Jansen, Berhane, Ellsberg & Garcia-Morena, 2011:84). Many female IPV victims that experience suicidal thoughts attempt to commit suicide (Dillon, *et al.*, 2013:7).

In South Africa, female IPV victims are also diagnosed with depression because of the abuse. South African researchers indicated that the younger female IPV victims are, especially those younger than 18 years, more prone to develop depressive symptoms (Nduna, Jewkes, Dunkle, Shai & Colman, 2013:46). In addition, the diagnosis of depression is mostly linked to sexual abuse (Lacey, McPherson, Samuel, Sears & Head, 2013:378). Moreover, research revealed that the longer the period that female IPV victims are exposed to the abuse, the higher the risk to develop depression (Ouellet-Morin, *et al.*, 2015:321).

Anxiety disorder is said to be less common among female IPV victims (Dillon, *et al.*, 2013:7). However, research conducted in Nigeria contradicts this statement. Here researchers are of the view that anxiety disorders in women are mostly because of IPV. The researchers are stating that anxiety disorder is directly linked to the threats and injuries the female IPV victim endures (Mapayi, Makanjuola, Mosaku, Adewuya, Afolabi, Aloba & Akinsulore, 2013:18). Anxiety disorder in female IPV victims, makes them more prone to develop post-traumatic stress disorder (Scott & Babcock, 2010:6).

Some female IPV victims are also diagnosed with symptoms related to stress (Woods, Kozachik & Hall, 2010:149). Symptoms of anxiety disorder include agitation and hyperarousal. Physical symptoms include sleep pattern disturbances such as insomnia, muscle pains and aches, headaches, dyspnea, dizziness and sweating (Kneisl & Trigoboff, 2013:396). Symptoms also include being afraid and constantly worrying, as well as feelings of regret (Middleton, 2014:311).

Post-traumatic stress disorder is the second most prevalent mental health illness that female IPV victims are diagnosed with (Dillon, *et al.*, 2013:6). Research indicated that female IPV victims that experience physical, emotional and sexual abuse are nine times more likely to develop post-traumatic stress disorder. Female IPV victims that are only exposed to one form of IPV will most likely not develop post-traumatic stress disorder. Post-traumatic stress disorder is mainly associated with having nightmares and re-living the traumatic events that occurred (Becker, Stuewig & McCloskey, 2010:1709; Kneisl & Trigoboff, 2013:398; Meintjies, 2014:656). Female IPV victims also experience strong feelings of remorse regarding the event (Beck, McNiff, Clapp, Olsen, Avery & Hagedwood, 2011:746). Another important reason for post-traumatic stress disorder in female IPV victims includes the victim's anticipation for the next episode of abuse to occur (Lagdon, *et al.*, 2014: 24800). Research also indicated that 46% of female IPV victims reported having feelings of frustration that can be positively linked with post-traumatic stress disorder (Chandra, *et al.*, 2009:206).

Female IPV victims are often isolated from their families and friends by the perpetrator (Bostock, Plumpton & Pratt, 2009:99; Lanier & Maume, 2009:1323). Furthermore, the perpetrator isolates female IPV victims from their support system (Meintjies, 2014: 681).

In South Africa, it was found that substance abuse among female IPV victims is directly linked with the coping mechanisms of the victims. Female IPV victims often experience a lack of coping mechanisms to deal with their abusive situations. Therefore, they often turn to the misuse of substances. These substances include the use of illegal drugs, alcohol, smoking of cigarettes, both over-the-counter and prescribed medication such as painkillers and sleeping tablets to help them cope with the abusive situation (Jina *et al.*, 2012:874; Gass, *et al.*, 2010:583). Substance abuse symptoms that female IPV victims might present with at PHCF include difficulty in coping with stress, speaking

loudly, feeling associated with extreme happiness, abandoning old friends, socializing with new people, irritability, memory loss. Signs of chronic substance abuse disorders include visual and auditory hallucinations, altered thoughts, isolation and insomnia (Uys, 2014:441), as well as headaches, sleeping problems, sweating and confusion (Department of Health, 2016:90).

Female IPV victims have a tendency to mostly turn to alcohol (Wathen, Jamieson & MacMillan, 2008:228; Kaysen, Dillworth, Simpson, Waldrop, Larimer & Resick, 2007:1279) especially if they are physically abused (Lacey, *et al.*, 2013:378). The abuse of alcohol increases the female IPV victim's vulnerability even more, making them more vulnerable for further abuse (Russel, *et al.*, 2014:293). IPV is also more prevalent in partnerships where one or both partners abuse alcohol (Abramsky, Watts, Garcia-Moreno, Devries, Kiss, Ellsberg, Jansen & Heise, 2011:1479). The symptoms of alcohol abuse female IPV victims might present with in PCHF include symptoms of heavy drinking, tremors, nausea, vomiting and gastritis (Kneisl & Trigoboff, 2013:300), as well as symptoms associated with liver diseases such as jaundice (Department of Health, 2016:90).

## **2.7 DISCLOSURE OF IPV**

Although female IPV victims are exposed to all forms of IPV (Boonzaier & Van Schalkwyk, 2011:279), they mostly report the physical abuse when disclosing (Sprague, *et al.*, 2014:127). However, the norm is that female IPV victims do not disclose being victims of abuse. Therefore, they give other reasons for their injuries when seeking medical assistance (WHO, 2013a:26). The most common reason why female IPV victims do not disclose is that they feel ashamed of their circumstances. The attitude of communities towards IPV where victims reside also influences their decision not to disclose. Most of the time female IPV victims feel that the communities are not empathic towards them and their circumstances (Boonzaier & Van Schalkwyk, 2011:276; Leone, Lape & Xu, 2014:1867).

Fear of the abusive partner also prevents female IPV victims from disclosing. Female IPV victims are often aware that if the abusive partner suspects or knows that they have disclosed the abuse, this will lead to more abuse. Research has also shown that career women often chose not to disclose being IPV victims. These women fear that



if they disclose they might have to file a police report which may have a negative effect on their career path (Leone, *et al.*, 2014:1868). Female IPV victims also often fear that PNS will break confidentiality and inform others about their abuse. Hence, they do not disclose (Spangaro, Zwi, Poulos & Man, 2010:676). In a study conducted in South Africa, nurses themselves indicated that they also do not disclose being a female IPV victim. The reason for their non-disclosure is that they fear stigmatisation. The nurses in this study expressed fear that their colleagues would discuss them with each other should they disclose (Sprague, *et al.*, 2016:175).

Most female IPV victims are also diagnosed with depression and fear that the perpetrator will use the knowledge against them. The perpetrator may blackmail female IPV victims by threatening them that they will have them declared insane and admitted to a mental institution. Female IPV victims' fear of being admitted to a mental institution often prevents them from disclosing being IPV victims. Female IPV victims may also believe that they have adequate support from their family and friends. Hence, they do not need further support from PNS, and do not disclose (Leone, *et al.*, 2014:1869). Some female IPV victims also believe that their injuries are not severe enough and they can cope with their injuries; therefore they do not disclose (Spangaro, *et al.*, 2010:676).

Female IPV victims that are exposed to daily abuse become accustomed to the abuse. Female IPV victims therefore view the abuse as being normal and part of their everyday life and do not see the need to disclose (Nittis, *et al.*, 2013:689). Female IPV victims may also feel the need to protect their family against the abuse of the perpetrator; hence they suffer the abuse and do not disclose (Clark, Silverman, Shahrouri, Everson-Rose & Groce, 2010:149).

The decision to disclose being a female IPV victim is influenced negatively by the bad attitude of PNS towards female IPV victims. If PNS fail to display empathy towards female IPV victims and their injuries, they will not disclose. Female IPV victims also struggle to disclose if they do not know the PN. The PNS must first build a trusting relationship with female IPV victims before she feels comfortable enough to disclose (Liebschutz, Battaglia, Finley & Averbuch, 2008:235).

Research has shown that female IPV victims are more likely to disclose being a female IPV victim if they are directly questioned about it by PNS (Robinson, 2010:575; Roelens, Verstraelen, Van Egmond & Temmerman, 2008:41; Spangaro, *et al.*, 2010:677). Female IPV victims also feel more comfortable disclosing to female PNS as they can identify more with a female figure (Robinson, 2010:575). The process of therapeutic use of self by the PNS also plays an important role in the disclosure of female IPV victims. If the verbal and non-verbal communication that PNS use makes female IPV victims feel comfortable, they will disclose (Joyner & Mash, 2011:8).

However, if female IPV victims disclose, they may do it both formally and informally. If female IPV victims disclose the abuse formally, they tend to rather disclose to PNS (Ansara & Hindin, 2010:1016). If they disclose the abuse informally, the victims will talk to family and friends about their abuse (Ansara & Hindin, 2010:1016; Clark, *et al.*, 2010:149). Disclosing of IPV is also influenced by the severity of the abuse. The more severe the abuse is, the more likely the victim will seek assistance by the police and counselling services (Ansara & Hindin, 2010:1015; Gracia, García & Lila, 2009:654).

As a result of the culture of non-disclosure of IPV, general screening for IPV is necessary. The screening should include female patients who present with physical, sexual, reproductive, emotional and/or mental illnesses and where IPV is suspected. Hence, screening for IPV will lead to more IPV cases being identified (Iskandar, *et al.*, 2015:1221). For it is only when female IPV victims are given the opportunity to tell their stories that their recovery process can begin (Nittis, *et al.*, 2013:689).

## **2.8 THE IPV GUIDELINES**

When female IPV victims decide to disclose, PNS should respond positively (Wong & Mellor, 2014:176). Hence, WHO (2013b:6) compiled certain guidelines to assist countries across the globe to combat the public health concern of IPV. These guidelines can be utilised by PNS and outlined as follows:

- Women-centred care

The WHO acknowledges that the experiences and effects of IPV will differ from female IPV victim to female IPV victim. Hence, each victim should be treated individually. If a female IPV victim discloses being abused, she should be assisted without any

hesitation. Furthermore, the WHO recommends that female IPV victims must be treated with an empathetic and non-judgemental attitude from PNS. PNS should utilise all the available resources to assist these victims. Furthermore, PNS should first ensure the safety of female IPV victims and their children. PNS should also explore the current support network of female IPV victims and utilise it if necessary. Furthermore, PNS should keep all the information about victims private and confidential. The WHO suggests enhancing confidentiality and the information in the patient records should be concise (WHO, 2013b:6).

- Identifying IPV

The WHO acknowledges that PNS find it difficult to identify IPV. Hence, they recommend that an IPV screening tool must be implemented to assist PNS to identify IPV. The WHO also establishes that women can be screened by making use of an IPV screening tool will not cause further damage to female IPV victims (WHO, 2013b:6).

- Interventions for IPV

The WHO further recommends that the interventions for female IPV victims should include counselling. WHO recommends that pharmacological treatment should not be given as a first line treatment plan for female IPV victims but must be replaced with counselling (WHO, 2013b:6).

- Safety and empowerment

The WHO recommends that female IPV victims should be referred to a place of safety if the environment at home is not safe. Female IPV victims should stay in the place of safety until she can provide her own safe accommodation. Female IPV victims should also receive training to empower her on her recovery journey. Therefore, the training should focus on the knowledge, skills and resources of victims to combat the problem of IPV (WHO, 2013b:6).

## **2.9 SCREENING FOR IPV IN PHCF**

IPV is viewed as a serious burden in the public health sector of countries and interventions are needed to relieve the public health sector from this burden (Black, 2011:435). Africa, including South Africa, is faced with the same situation and

emphasised the need to intervene with IPV. However, before Africa can start with interventions, African countries must first introduce a process to identify IPV in the health sector. This can be made possible by means of an IPV screening tool that will assist with the identification of IPV (Russel, *et al.*, 2014:293; Roman & Frantz, 2013:264). IPV screening must be compulsory for all female patients who are sexually mature (Moyer, 2013:483; Grandour, Campbell & Lloyd, 2015:58). Women supported the notion of routine IPV screening every time they visit healthcare services (Undie, *et al.*, 2016:297; Diez, *et al.*, 2009:424).

PHCF is the first level of entry in the public health sector for clients, which creates an ideal environment and opportunity to identify IPV (Black, 2011:436; Williams, Halstead, Salani & Koermer, 2016: 377; Roark, 2010:495). A lot of female IPV victims visit PHCF (WHO, 2012a:46) to be treated for general health problems or problems related to the abuse (Alhabib, *et al.*, 2010:375). PNS have the most contact with women visiting PHCF. Therefore, they are naturally viewed as the healthcare professional that have the best opportunity to identify IPV (Wong & Mellor, 2014:177; Undie, *et al.*, 2016: 299; WHO, 2012a:46). PNS agreed with the statement that they are in the best position to screen for female IPV (Almutairi, Alrashidi, Almerri, Kamel & El-Shazly, 2013:93; Williams, *et al.*, 2016:381).

Although PNS, must enquire formally or informally about IPV if there is evidence to suspect abuse (Almutairi, *et al.*, 2013:93). This process is hampered because PNS are also not aware of a standardised IPV screening tool that can be used to identify IPV (Williams, *et al.*, 2016:381). PNS are also not aware of the guidelines to assist them with the IPV screening process (Robinson, 2010:575; Joyner & Mash, 2012b:4). Therefore, they identified the need for a standardised IPV screening tool (Williams, *et al.*, 2016:381).

In countries such as Australia, the United States of America and the United Kingdom, IPV screening has been successfully implemented (O'Campo, Kirst, Tsamis, Chambers & Ahmad, 2011:859). In South Africa, currently one public hospital in Gauteng including PNS is screening female patients for IPV. Although there is no formal IPV screening tool, the nurses are guided by the type of injuries, the severity of the injuries and the emotional wellbeing that they observed in their female patients at the time of treatment. The nurses will then refer female IPV victims to relevant referral

services for interventions. The nurses also perceived themselves as part of the community and broader society. This perception makes them aware of the fact that they themselves can also be affected by IPV. Therefore, they are willing to assist female IPV victims (Sprague, Hatcher, Woollett & Black, 2017:19).

IPV screening can add to the current workload of PNS that are already overworked in PHCF. Hence, a self-administered IPV screening tool will be an ideal tool (Iskandar, *et al.*, 2015:1219). The IPV screening tool must be user friendly for both the woman and the PNS. The IPV screening tool should include questions related to physical abuse, substance abuse, sexual abuse and symptoms of mental illnesses such as depression and post-traumatic stress disorder (Grandour, *et al.*, 2015:58; Moyer, 2013:483). The IPV screening tool should also consist of questions that identify physical symptoms of IPV such as pain, sleeping problems, eating habits, fatigue, happiness, sadness, stress and suicidal ideation (Bell, Lori, Redman & Seng, 2015:1205). Furthermore, the IPV screening tool should include questions regarding female IPV victim's safety and her fear of the abusive partner (Almutairi, *et al.*, 2013:93).

The financial implication for healthcare systems should always be considered when screening and intervening with IPV (Gold, Norman, Devine, Feder, Taft & Hegarty, 2011: 399). Screening for IPV is inexpensive (Daugherty & Houry, 2008:304) and is thus affordable for the public healthcare sector. The healthcare systems already have certain screening and intervention resources in place such as patient files and referral services which are available for all patients that attend PHCF. Limited costs will be added on the budgets of PHCF for the IPV screening tool and the referral process (Undie, *et al.*, 2016:279). However, more money would be spent if female IPV victims are not identified and need treatment for mental health disorders and physical injuries with expensive pharmaceutical treatment. This adds an extra financial burden on the often already burdened healthcare systems (Rivara, Anderson, Fishman, Bonomi, Reid, Carrel & Thompson, 2007:92).

## **2.10 THE KNOWLEDGE OF PNS REGARDING IPV**

Although PNS recognise the symptoms of IPV in female IPV victims, they are often unable to link the symptoms to IPV (Joyner & Mash, 2012b:4). PNS are also not always

aware of the magnitude of the problem of IPV in their different countries; therefore they struggle to identify IPV in female IPV victims (Vieira, Dos Santos & Ford, 2012:247). Hence, they do not enquire about IPV when treating these patients at PHCF. PNS also became accustomed to the first line of treatment that focused on resolving the effects of IPV by prescribing pharmaceutical treatment (Joyner & Mash, 2012b:4; Colombini, *et al.*, 2013:8). Therefore, only the symptoms of IPV are treated and not the abuse itself (Colombini, *et al.*, 2013:8).

The above might be linked to a lack of knowledge because of inadequate training in the field of IPV (Robinson, 2010:575; Nyame, Howard, Feder & Trevillion, 2013:541; Waalen, Goodwin, Spitz, Petersen & Saltzman, 2000:235; Beynon, Gutmanis, Tutty, Wathen & MacMillan, 2012:973). As PNS are the key role players in the identification of IPV (Carretta, 2008:34), they should have adequate knowledge regarding the identification of IPV (Nyame, *et al.*, 2013:541). Training for PNS is essential in the identification of IPV (Vieira, *et al.*, 2012:247; Nyame, *et al.*, 2013:541; Goicolea, Vives-Cases, Sebastian, Marchal, Kegels & Hurtig, 2013:44; Wong & Mellor, 2014:176; WHO, 2012a:46; Alhabib, *et al.*, 2010:375; Bull, 2009:620; Walton, Aerts, Burkhart & Terry, 2015:2).

Research found that in countries where PNS received training about IPV, including the prevalence of IPV, made them more aware of the problem. These PNS enquire more about IPV when examining a patient after the training. These PNS also tend to be more empathetic towards female IPV victims. The training should include awareness about IPV, the prevalence of IPV and the available screening method for IPV in the healthcare system (Vieira, *et al.*, 2012:247). PNS should also have knowledge of the referral structure and services available for female IPV victims in their respective healthcare systems (Garcia-Moreno, Hegarty, Lucas d'Oliviera, Koziol - Maclain Colombini & Feder, 2015:1574).

Training on the topic of IPV should be included in the basic degree or diploma of healthcare professionals. To address the lack of training in PNS that are already working in PHCF, in-service training should be provided on the topic of IPV (Rees, Zweigenthal & Joyner, 2014:557; Garcia-Moreno, *et al.*, 2015:1574). Through adequate training on the topic of IPV, PNS working in PHCF will not only be willing but will also be able to identify IPV (Undie, *et al.*, 2016:297).

## 2.11 REFERRALS OF THE FEMALE IPV VICTIMS

Female IPV victims should be referred to other members of the multi-disciplinary team to assist them with interventions to address IPV. These services include social workers and psychologists (Colombini, *et al.*, 2013:10; Garcia-Moreno, *et al.*, 2014:1575; Williams, *et al.*, 2016:381; South Africa, Department of Health, 2016:56) as well as the psychiatric nurse (South Africa, Department of Health, 2016:56). However, limited referral structures in the healthcare systems often hamper the referral of female IPV victims. PNS are either not aware of the referral structures or the referral structures do not exist at all (Nyame, *et al.*, 2013:541). Policies and guidelines regarding IPV should include the referral resources available for female IPV victims and these referral resources should be easily accessible for PNS (Plichta, 2007:233).

The aim of the referral of female IPV victims in South Africa agrees with WHO's guidelines to empower female IPV victims (Sipamla, 2012:6; WHO, 2013b:16). Legislation (South Africa. Domestic Violence Act 116 of 1998, 4) indicates that female IPV victims should also be informed on how and where to obtain a protection order against the perpetrator, since female IPV victims are entitled to be protected by law and the South African Police. This will give female IPV victims the right to lay a charge at the police and obtain a protection order from the court. The protection order may prevent the perpetrator from abusing the victim or contacting or visiting the victim. In the case of financial abuse, the court can also force the perpetrator to pay the rent or bond of the victim.

Female IPV victims should be trained on how to develop a plan to safeguard themselves and their families. A list of the emergency telephone numbers where female IPV victims can seek help should also be available for victims. The emergency numbers should include the telephone number of the police and women abuse hotline, as well as various overnight shelters (Western Cape Department of Social Development, 2009:10).

Social workers and lay counsellors should be adequately trained on the topic of IPV. The training should include counselling skills to assist female IPV victims. In addition, lay counsellors should be placed at facilities where female IPV victims might seek assistance. These places include healthcare facilities, police stations and courts (Sipamla, 2012:6; South Africa. Department of Health, 2016:56).

Overnight shelter facilities, also referred to as places of safety, are available across South Africa. In the Eastern Cape Province, of which the NMBHD forms part, there are 11 overnight shelters available for female IPV victims. The aim of the overnight shelters is to provide a place of safety for female IPV victims and their families (Sipamla, 2012:7). Non-governmental organisations also manage their own shelters for abused women (Department of Health, 2016:56).

Referral services for female IPV victims such as psychologists and social workers form part of the public services; these services are freely available and accessible for the residents of the country. Therefore, no extra financial expenses will be added to the public health sector because there are already counselling services available (Undie, *et al.*, 2016:279).

## **2.12 SUMMARY OF THE CHAPTER**

In conclusion, IPV is a big concern both globally and in South Africa. As discussed, the effect of IPV can be devastating for female IPV victims both physically and mentally. Hence, to address the problem, implementing an IPV screening can be beneficial for female IPV victims. In the NMBHD, PHCF are the first point of entry into the public healthcare system where patients are mainly managed and treated by PNS. Hence, PHCF is the ideal environment for the identification of IPV. Chapter Three will outline a detailed description and application of the research design and methodology per phase of the research study.



## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 INTRODUCTION**

In Chapter Two, the researcher presented the literature review of the research study. In Chapter Three, the researcher will discuss the research design and methodology of the study. The researcher used a quantitative, quasi-experimental one group pre-and post-test design. The study was conducted in three phases. In phase one of the research study, the researcher conducted the pre-test. In phase two of the research study, the researcher conducted educational sessions to the participants and the participants implemented the independent variable, namely the IPV screening tool. In phase three of the research study, the researcher conducted the post-test. In this chapter, the researcher discusses the application of the research design and methodology per phase of the research study including population and sampling, data collection and data analysis. The researcher also discusses the development of the pre-and post-test questionnaire, pilot study, recruitment of fieldworkers, reliability and validity, as well as ethical considerations.

#### **3.2 RESEARCH DESIGN AND METHODS**

The researcher conducted a small intervention study utilizing a quantitative, quasi-experimental, pre-test post-test design, explained below.

##### **3.2.1 Quantitative research design**

A quantitative research design focuses on randomisation, manipulation and control of the variables (Brink, *et al.*, 2013:96). Quantitative research enables the researcher to view the world from a different angle (Brown, 2014:20). The aim of a quantitative research design is to narrow the gap in the knowledge regarding the specific topic (Schmidt & Brown, 2009:124; David & Sutton, 2011:82). Furthermore, quantitative data may also be used to describe new phenomena (Moule & Goodman, 2012:177).

A quantitative research design focuses on figures that will be interpreted by statistics (Moule & Goodman, 2012:177). The information in quantitative research designs is gathered through a data collection instrument. The information on the data collection

instrument must be captured with methods that enable the researcher to count the data. A quantitative research design analyses the data step by step into smaller fragments to provide a holistic view of the data (David & Sutton, 2011:82).

A quantitative research design can be divided into experimental and non-experimental research design (David & Sutton, 2011:82; Fouché, *et al.*, 2014:144; Schmidt & Brown, 2009:124). If the researcher uses the experimental design, the researcher can manipulate the independent variable to have a specific effect on the outcome of the study; whereas in the non-experimental design the researcher focused on the description of the positive and negative in the relationships between the variables. The researcher observed the relationships to determine similarities and differences between the variables (Schmidt & Brown, 2009:124). In conclusion, the key elements presented in the quantitative research design include descriptiveness, a big sample size, introducing an independent variable, direct questions, statistical analysis of data and results that are communicated and supported by the existing literature and/or the results can be guest (Ivankova, Creswell & Plano Clark, 2016:307).

In this research study, a quantitative research design was used as numerical data was collected to determine the knowledge and practices of PNS regarding IPV and to introduce the use of an IPV screening tool in PHCF to assist PNS to identify IPV.

### **3.2.2 Quasi-experimental design**

Quasi-experimental research design has some of the properties of the experimental design (David & Sutton, 2011:206; Fouché, *et al.*, 2014:144). Quasi-experimental research can be divided into groups according to their different characteristics (David & Sutton, 2011:206). Quasi-experimental research design allows the researcher to control the variables to fit the research study. It also allows the researchers to conduct pre-and post-tests (Brink *et al.*, 2013:103). One of the three main characteristics of quasi-experimental research includes an absent characteristic. The absent characteristic can either be the control part, manipulation part or randomization part. In addition, quasi-experimental research design focuses on the comparison of the treatment used or procedure with the current practice (Moule & Goodman, 2012:179). A benefit of quasi-experimental design is that it is not as expensive as other types of research designs (LoBiondo-Wood & Haber, 2010:189). The researcher, however,

must take certain precautions to ensure the reliability of the study (Brink, *et al.*, 2013:172). In this research study, the randomization part is absent.

### 3.2.3 Intervention research study

Intervention research is used in studies that involve people. The overall aim of intervention research is to develop new ways of assisting people to improve their lives (De Vos & Strydom, 2014b:474). In this study, the researcher aimed at using intervention research to introduce an IPV screening tool to assist PNS to identify IPV. In this research study, a quasi-experimental design was used following a one-group pre-test and post-test design as follows.

### 3.2.4 One-group pre-test and post-test design

A one-group pre-test and post-test design was conducted in three phases. The first phase focused on the assessment of the current dependent variable (knowledge/practices) that is used. The second phase focused on the introduction of an independent variable (IPV screening tool). The third phase focused on the assessment of the dependent variable after the introduction of the independent variable (Fouché, *et al.*, 2014:147; Maree & Pietersen, 2016:167). The one-group pre-test and post-test design was conducted in three different phases linked to the research study's objectives as illustrated in Table 3.1.

**Table 3.1: Three phases linked to objectives**

Phase	Objective	Method
Phase one	To determine the current knowledge and practices of PNS to identify IPV	Pre-test questionnaire
Phase two	To introduce an IPV screening tool that will focus on the identification of IPV	Educational session Implementation of IPV screening tool
Phase three	To evaluate the knowledge of the PNS obtained in the workshop and the practices post-implementation of the IPV screening tool.	Post-test questionnaire

The methodology will now be explained. The researcher first developed the pre-and post-test questionnaires and recruited the fieldworkers before conducting phase one of the study as explained below.

### **3.2.5 Methodology**

#### **3.2.5.1 Development of the pre-test and post-test questionnaire**

Moule and Goodman (2012:305) stated that a questionnaire as the data collection instrument has certain advantages and disadvantages. The researcher used questionnaires for its advantages which include the following:

- It is a cheap method,
- the anonymous questionnaires ensured privacy,
- data was easily captured and analysed, and
- the researcher did not have to be present at all the PHCF where data was collected.

One of the disadvantages of the questionnaire was that participants returned the questionnaire without completing it (Moule & Goodman, 2012:305).

The questionnaire consisted of open-ended or/and closed-ended questions. Questionnaires can include a checklist response or Likert-scale response (Brink, *et al.*, 2013:155; Moule & Goodman, 2012:302). Open-ended questions gave the participant the opportunity to answer the question based on their own knowledge of the topic. It also gave the researcher access to extra data which enhances the research study (Delpont & Roestenburg, 2014:196; Polit & Beck, 2009:343). Equally important, open-ended questions gave the participant the opportunity to provide their true opinion regarding the research (Maree & Pietersen, 2016:180). On the other hand, closed-ended questions were difficult to formulate for the researcher but easier to answer by the participant. Furthermore, closed-ended questions were often selected for their capability to enable the researcher to compare the data (Polit & Beck, 2009:343). In addition, Likert-scale formats enabled the participants to choose from 5 different options. These options included strongly agree, agree, disagree, strongly disagree and neither agree nor disagree (Brink, *et al.*, 2013:159; Neale, 2009:128).

The questionnaire was developed based on the literature review (see Chapter Two). The researcher used both open- and closed-ended questions in the pre-test questionnaire. This enabled the researcher to obtain a substantial amount of data from the participants. The aim of the questions was to test the current knowledge and practices of the participants on the research topic.

The pre-test and post-test questionnaires were both divided into three sections, namely section A, section B and section C. The formatting of the sections was as follows:

- Section A, focused on the demographical data of the participants (six closed-ended questions) (both pre-and post-test questionnaires),
- Section B focused on identifying IPV (Likert-scale format and open-ended questions) (both pre-and post-test questionnaires),
- Section C focused on the IPV screening tool (Likert-scale and open-ended questions) (both pre-and post-test questionnaires),
- Section D focused on determining whether participants participated in phase one of the research study and attended the educational session of phase two of the research study (two closed-ended questions) (post-test questionnaire).

The questionnaire consisted of 18 closed-ended questions and 11 open-ended questions. There were 13 closed-ended questions in section B in the form of a 5-point Likert-scale. The 13 closed-ended questions in section B focused on the problem of IPV in South Africa, disclosure of IPV, if PNS enquired about IPV, physical and mental symptoms associated with IPV, as well as the symptoms that female IPV victims can present with in the PHCF. The participants were requested to choose between the options ranging from strongly agree, agree, disagree, strongly disagree to neither agree nor disagree. Section C consisted of the 5 closed-ended questions also the form of a 5-point Likert-scale which focused on screening for IPV and the current tool used in PHCF to identify IPV.

The 11 open-ended questions were based on the literature review. The participants had to prioritize their answers on these questions in the form of priority to each individual. Section B consisted of 10 open-ended questions. The open-ended questions in section B focused on WHO's definition of IPV. Furthermore, the open-

ended questions focused on the symptoms associated with depression, anxiety, post-traumatic stress disorder and substance abuse that can be linked to IPV. Section C consisted of one open-ended question that focused on the referral of female IPV victims according to the literature review (See Annexure 1 for the Pre-test questionnaire and Annexure 2 for the post-test questionnaire).

### **3.2.5.2 Utilization of fieldworkers**

Fieldworkers enhanced the data collection of the research study (Molyneux, Kamuya & Marsh, 2010:25). The researcher used the assistance of fieldworkers to assist with the data collection process. The fieldworkers liaised directly with the research sample whilst collecting the data from the participant (Molyneux, Kamuya, Madiaga, Chantler, Angwenyi & Geissler, 2013:ii). The selection of the fieldworkers was integral to the research study because an incorrect selection might have had a negative effect on the research study (Molyneux, *et al.*, 2010:25). Furthermore, using community members as fieldworkers might have increased the risk of bias because they live in the same community. Therefore, the researcher should avoid this (Kamuya, Theobald, Munywoki, Koech, Geissler & Molyneux, 2013:9; Mosavel, Ahmed, Daniels & Simon, 2011:150). The fieldworkers should be trained by the researcher to ensure the data collection process is conducted correctly (Brink, *et al.*, 2013:149). Fieldworkers must sign an agreement to ensure that they keep all information regarding the research study confidential (Brink, *et al.* 2013:42).

The researcher recruited PNS as fieldworkers to assist with the data collection. Fieldworker 1 was an unemployed professional nurse and fieldworker 2 a retired professional nurse. Furthermore, the fieldworkers both had personal experience in PHCF as they worked in PHCF before. In addition, one of the PNS had a master's degree whilst the other one had extensive experience in mental health nursing. This improved the data collection process. The researcher first contacted the fieldworkers telephonically and explained the research study to the fieldworkers. Both the fieldworkers indicated that they were interested in being fieldworkers in the research study. The researcher then arranged a meeting with the fieldworkers. The first meeting was conducted at the end of January. As both fieldworkers were not available on the same dates, the researcher conducted two individual training sessions with the fieldworkers. The researcher formally explained the study to the fieldworkers and

conducted a training session with the fieldworkers. The training session included the following;

- The aim and purpose of the study,
- The background of the study,
- The research objectives,
- The role of the fieldworkers,
- The data collection process,
- The population, sampling, inclusive- and exclusive criteria,
- The training information that the fieldworkers must present for the PNS, and
- The screening tool.

Both the fieldworkers signed an agreement that includes the following;

- to conduct phases 1 and 2 of the research study, namely the pre-test and educational sessions at the PHCF allocated by the researcher,
- to conduct the sessions in phase one in the 40 minutes' timeslots allocated to the study,
- to keep all the information regarding the study and the data collected confidential and safe,
- to submit the completed pre-test questionnaires to the researcher on a weekly basis, and
- the hourly rate for remuneration and petrol allowance. (See Annexure 3 The fieldworker's agreement).

The researcher emphasized that the fieldworkers must keep all the information regarding the research study confidential. After collecting the data of phase one from 9 of the participating PHCF, fieldworker 1 resigned at the end of March due to a permanent work opportunity. The researcher recruited another fieldworker. This fieldworker, fieldworker 3, was also an unemployed PN. The researcher went through the whole training process with fieldworker 3 after which the fieldworker signed the agreement as well. The researcher accompanied fieldworker 3 to her first PHCF to assess how she conducted the session. The researcher was satisfied with the session.

The researcher met with each fieldworker individually after the first week of the data collection process at the PHCF. Furthermore, the researcher discussed the experiences of the fieldworkers with the data collection sessions. Fieldworker 2 indicated that she wanted to leave the study after 4 consecutive unsuccessful phase one attempts. Fieldworker 2's reason was that she did not want to be responsible for the delay in the research study. The researcher then explained to the fieldworker that this was beyond her control and shared with her that the other fieldworker had similar experiences. The fieldworker then decided to give it another try. The following week all the PHCF of fieldworker 2 participated in phase 1 of the study. Fieldworker 1 gave positive feedback on the PNS willingness to participate in the study.

The researcher contacted the fieldworkers telephonically on a weekly basis to enquire whether they needed more pre-test or post-test questionnaires, information letters, participation consent forms or screening tools. The researcher met the fieldworkers every alternate week to collect the completed pre-test questionnaires (during phase one) and post-test questionnaires (during phase three). After the completion of phase one of the study, the researcher met individually with the fieldworkers to discuss their experiences of phase one and to identify any challenges. No challenges were experienced by the fieldworkers. The researcher collected all the extra material that was not used during phase one from the fieldworkers. Seven PHCF requested the fieldworkers or researcher to reschedule the appointments between two to four times.

Phase three was conducted by two fieldworkers (fieldworker 1 and fieldworker 2). The researcher followed the same principles with the fieldworkers as explained in phase one. Four PHCF requested the researcher and the fieldworkers to reschedule the appointments.

The methodology will be discussed per phase of the study as follows.

### **3.2.5.3 Phase one of the research study**

During the pre-test, the researcher determined the current dependent variable that was in use (Fouché, *et al.*, 2014:147). A pre-test questionnaire was developed to conduct phase one of the research study. Phase one was conducted over a two-month period, from February until April in the PHCF in the NMBHD. The aim of phase one was to determine the current knowledge and practices utilised by participants to



identify IPV. The methodology of phase one in terms of population and sampling, data collection, the recruitment of the participants, pre-test questionnaire, fieldworkers, data analysis and pilot study are discussed as follows.

#### **3.2.5.3.1 Population and sampling**

The population in the research study was PNS working in PHCF in South Africa. However, the researcher did not have access to the whole population due to geographical and financial challenges. Hence, the researcher chose an all-inclusive sample of the population that resided in the NMBHD.

As the population was small, the researcher chose all two-hundred PNS working in PHCF in the NMBHD to participate in the research study. The researcher specifically selected PNS as the sample from all the members of the multi-disciplinary team working in PHCF. The participants in South Africa were trained to examine, diagnose and treat certain ailments in PHCF; hence they are most often the first point of contact for women that access the services for physical ailments. Secondly, of all the various categories of nurses working in PHCF, the PNS were the nurses that were the most knowledgeable about the research topic. The researcher or fieldworkers selected the participants that met the inclusion criteria to participate in the research study. The inclusion criteria indicated that the participants had to be working in the PHCF for at least six months or longer. It was thought that these participants might have knowledge and experience to be in an ideal position to respond to the research question. The sample size was ( $n_1=137$ ) participants from thirty-three PCHF of the three sub-districts of the NMBHD that participated in the research study. See Table 3.2 for the participating PNS per PHCF in phase one of the research study.

**Table 3.2: Participating PNS per PHCF in phase one**

Sub-district A		Sub-district B		Sub-district C	
PHCF	Number of PNS	PHCF	Number of PNS	PHCF	Number of PNS
A 1	4	B 13	3	C 26	4
A 2	6	B 14	8	C 27	2
A 3	5	B 15	6	C 28	3
A 4	4	B 16	4	C 29	1
A 5	3	B 17	8	C 30	2
A 6	4	B 18	3	C 31	3
A 7	3	B 19	3	C 32	2
A 8	9	B 20	4	C 33	1
A 9	6	B 21	5		
A10	4	B 22	3		
A 11	6	B 23	4		
A12	5	B 24	5		
		B 25	4		
<b>n= 12</b>	<b>n=59</b>	<b>n=13</b>	<b>n=60</b>	<b>n=8</b>	<b>n=18</b>

**3.2.5.3.2 Data collection**

The data collection included the recruitment of participants, pre-test questionnaire, fieldworkers, data collection of phase one, pilot study and the data analysis as outlined in the sections below.

**3.2.5.3.2.1 The recruitment of the participants**

As indicated in Table 3.2, the NMBHD is divided into the three sub-districts, namely sub-districts A, B and C. Hence, the researcher telephonically contacted the three sub-district managers of each sub-district in the NMBHD. The researcher explained the research study, objectives, research question, sample and the three phases of the research study to each sub-district manager. Furthermore, the researcher obtained

verbal permission from each sub-district manager to conduct the research study in their sub-district. The telephonic conversation was followed with an electronic correspondence in the form of an email. The approval letters from the ethical clearance letter from the Faculty Postgraduate Studies Committee at the Nelson Mandela University, Department of Health, Eastern Cape, as well as the clinical governance manager of the NMBHD, were attached to the emails (see Annexures 4, 5 and 6). Furthermore, the researcher conducted one-on-one meetings with two of the sub-district managers (sub-district A and sub-district B) to discuss the research study in detail. The two sub-district managers supplied the researcher with the physical address list and contact numbers of the various PCHF in their respective sub-district. The remaining one sub-district manager sent the information electronically to the researcher. All three sub-district managers granted the researcher verbal consent to conduct the study in the various PCHF.

The researcher then telephonically contacted the three supervisors of sub-districts A, B and C that oversee the PCHF in the various sub-districts. The researcher informed them about the research study and the permission obtained from the various institutions. This step was also followed-up with an electronic correspondence in the form of an email with all the approval letters attached to the email.

After this step, the researcher contacted the facility managers of each PCHF telephonically. The researcher explained the study to the various facility managers, the three phases of the study and the benefits of the research study to the PCHF. The researcher then requested a timeslot in the morning meeting sessions or in the weekly training sessions of each PCHF to conduct the research. Furthermore, the researcher requested the facility managers to act as gatekeepers and to introduce the researcher or fieldworker to the participants at the staff meetings of each PCHF. The researcher also informed the facility managers which specific fieldworker would visit the PCHF to collect the research data. The facility managers allocated a timeslot to the researcher or the fieldworkers. Most of the facility managers gave a timeslot in the following week to conduct phase one of the study. However, many PCHF requested the researcher to conduct phase one in the afternoons when the participants were not too busy. An electronic correspondence was sent to the facility managers that requested the proof of permission from the various institutions.

### 3.2.5.3.2.2 Pre-test questionnaire

The pre-test questionnaire was divided into sections A, B and C (refer to section 3.2.5.1). (Annexure 1, the pre-test questionnaire).

### 3.2.5.3.2.3 Fieldworkers

The researcher and three fieldworkers collected the data for phase one as explained in section 3.2.5.2 and the section below. The researcher divided the PHCF amongst the research team for the data collection process of phase one of the research study as indicated in Table 3.3.

**Table 3.3: PHCF allocation per research team member (pre-test)**

Sub-district A	Sub-district B	Sub-district A & C	Researcher
Fieldworker 1	Fieldworker 2	Fieldworker 3	Sub-district A
A 1	B 13	C 27	A10
A 2	B 14	C 28	Sub-district C
A 3	B 15	C 29	C 26
A 4	B 16	C 30	C 33
A 5	B 17	C 31	
A 6	B 18	C 32	
A 7	B 19	A 11	
A 8	B 20	A12	
A 9	B 21		
	B 22		
	B 23		
	B 24		
	B 25		
<b>n= 9</b>	<b>n=13</b>	<b>n=8</b>	<b>n=3</b>

On each day of phase one, the researcher or fieldworker first went individually to the facility managers in the PHCF to introduce themselves and showed the approval

letters to the facility managers. The facility managers then took the researcher or fieldworker to the staff room where the participants were either waiting or the facility manager called them. The researcher or the fieldworkers utilised the timeslots allocated to them as follows: The researcher or fieldworkers first explained the research topic, the research question, the aim and objectives of the research study to the participants. Furthermore, the researcher or the fieldworkers explained the three phases of the research study to the participants. They explained to the participants that their general knowledge about the topic is tested and not theory knowledge. The researcher or fieldworker then allowed the participants to ask questions if they needed any clarity. Thereafter, an information letter was distributed, and participants were requested to complete a consent form. (See Annexure 7, the information letter and Annexure 8, the consent form). Delpont and Roestenburg (2014:118) stated that participants should be informed that they could withdraw from the research study at any stage should they wish to. The researcher and fieldworkers explained this statement to the participants. The researcher or fieldworker then collected the completed consent forms. Furthermore, the researcher or fieldworkers distributed the anonymous pre-test questionnaires and requested the participants to complete the pre-test questionnaires. The researcher or fieldworker stayed in the venue to assist the participants if any of the questions were unclear and needed an explanation. After 15 minutes, the participants submitted the completed pre-test questionnaire to the researcher or fieldworker. Seven PHCF requested the research team to reschedule the appointments due to the unavailability of participants because of their heavy workloads for the day.

#### **3.2.5.3.2.4 Data analysis**

Descriptive statistics described and summarised the research data. Therefore, the data captured must be accurate to provide a true reflection of the results (Brink, *et al.*, 2013:180; Schmidt & Brown, 2009:253). Descriptive statistics allowed the researcher to capture the research data using numbers and percentages (Moule & Goodman, 2012:327). Inferential statistics were used to analyse the data to determine the results of the research study (Schmidt & Brown, 2009:254). It enabled the researcher to generalize the findings obtained from the research sample (Moule & Goodman, 2012:327). To conclude, inferential statistics gave an accurate reflection of the information as given by the participants of the research study (LoBiondo-Wood &

Haber, 2010:318). Chi-square inferential statistics were used (LoBiondo-Wood & Haber, 2010:313; Schmidt & Brown, 2009:2842).

Chi-square statistics is a non-parametric test. The aim of Chi-square statistics was to count and compare the frequencies reflected in the answer of the research data (Schmidt & Brown, 2009:284; Neale, 2009:132). Furthermore, Chi-square statistics firstly count the frequencies of the specific answers to each question (LoBiondo-Wood & Haber, 2010:313; Neale, 2009:131). Secondly, Chi-square statistics focus on the frequencies in similarities in the answers (David & Sutton, 2011:473). It enabled the researcher to allocate a mark to the Likert-scale response of the participants. The marks were then individually calculated per question to determine the total (Moule & Goodman, 2012:306).

The researcher captured the data from the pre-test questionnaires on an Excel-spread sheet. Each completed pre-test questionnaire was allocated a numerical number as an identification number. Out of the 137 pre-test questionnaires completed, the data of only 128 was captured as 9 were incomplete. Thereafter, the researcher captured each pre-test questionnaire as per the following sections, demographic data, knowledge and practices as guided by the statistician. The researcher requested the assistance of a statistician from the Nelson Mandela University to analyse the data from the pre-test questionnaires using statistics. After the completion of phase one, phase two was implemented as discussed in the following section.

#### **3.2.5.3.2.5 The pilot study**

The pilot study specifically tested if a questionnaire was the correct data collection method for the research study. The pilot study also tested if the questionnaire collected the correct information that was intended to collect to answer the research question. If the questions on the questionnaire failed to collect the correct information, the questions would either be completely changed or rephrased. The pilot study was conducted on the same type of population as in the main research study (David & Sutton, 2011:473) and the same inclusive- and exclusive criteria were used (Moule & Goodman, 2012:303). Maree and Pietersen (2016:179) stated that the timeframe to complete a pre-and post-test questionnaire should be tested in a pilot study. The data collected in the pilot study did not form part of the findings of the main research study (David & Sutton, 2011:473).

In this study, the researcher conducted the pilot study to test the pre-test questionnaire as well as the post-test questionnaire in the Kouga Health District at three PHCF. The researcher also wanted to determine whether the study was feasible. The researcher chose this district because it consists of similar clinics and community health centres as PHCF, but it did not form part of the NMBHD. The researcher first requested written permission from the area manager of the Kouga Health District to conduct the pilot study at the PHCF. The researcher also obtained verbal permission from the sub-district manager to conduct the pilot study on 25 January 2017 in the three PCHF. This was followed by a telephonic contact to the various PHCF. The researcher explained the study to the PHCF manager and arranged a timeslot to conduct the pilot study at each PHCF. Furthermore, the researcher reminded the facility managers of the pilot study on 24<sup>th</sup> of January. The researcher started at 08H00 at the first PHCF and ended at 14H30 at the last PHCF. At each PHCF, the facility manager arranged that the researcher conduct the pilot study with all participants in either the rest room or an office in the PHCF. The researcher explained the study and the pilot study to the PNS. The pilot study was also explained on the cover letter of the pre-test questionnaire. After which, the researcher requested verbal permission from the PNS to participate in the pilot study. Thereafter, the participants were requested to complete the pre-test and post-test questionnaire in the rest room or in the individual offices in the PHCF. After 15 minutes, the participants submitted the completed instruments to the researcher. The researcher verbally thanked the participants for participating in the pilot study. Nine participants, three from each PHCF, participated in the pilot study. The following observations were made by the researcher during the pilot study;

- Some PNS requested more time to complete the pre-test questionnaires because PHCF were extremely busy in the mornings and,
- Some PNS completed the pre-test questionnaires in the timeframe that was allocated to them,
- Some PNS requested assistance from the nursing students that were working in the PHCF to complete the pre-test questionnaires. This was problematic because it was not the PNS's own knowledge and will not give a true reflection of their knowledge.

The verbal feedback from the participants regarding the researcher study and the pre-test questionnaires was positive. Some of the participants suggested that the same research study should be done amongst same sex-relationship partners. This is included as recommendation as the focus of this study were PNS. Most of the participants understood the questions on the research instrument. Only one participant was uncertain if the questions should be answered as per her general knowledge or book knowledge. One participant was unsure about the symptoms of substance abuse and alcohol abuse as she felt that there should be only one question under substance abuse.

After the completion of the pilot study, the following changes were made in agreement with the supervisors;

- The data collection process per PHCF is a time-consuming exercise, hence the researcher would appoint and train fieldworkers to collect the data at the PHCF in the NMBHD,
- the sessions at each PHCF would be conducted after two o'clock or at a time that is allocated by the facility managers when the facilities are not busy,

The data that was collected with the pilot study was not analysed and used in the findings in the main study.

The methodology of phase two of the research study will now be outlined.

#### **3.2.5.4 Phase two of the research study**

During the intervention phase, the IPV screening tool was introduced as an independent variable (Fouché, *et al.*, 2014:147). The researcher adapted the existing screening tool used in a study in the Western Cape Province for this study (Joyner, 2009:359). See Annexure 9 for the IPV screening tool.

Phase two of the research study was to introduce an IPV screening tool that would focus on the identification of IPV. Phase two was conducted through an educational session on the research topic and the IPV screening tool. An intervention or new phenomenon in the form of an independent variable was implemented to the dependent variable.



Immediately after the completed pre-test questionnaires were submitted, the researcher or fieldworker conducted an educational session with the participants. The educational sessions were in the form of an oral presentation of 20 minutes each. In total the participants used 35 minutes to complete phase one and phase two. The information given in the educational sessions was taken from the literature review as follows:

- WHO 's definition of IPV (section 2.2),
- the statistics of IPV (section 2.3),
- the effects of IPV (section 2.5),
- the presenting complaints at PHCF by female IPV victims (section 2.5),
- the referral structures of female IPV victims in South Africa (section 2.9),
- the introducing of the IPV screening tool (section 2.7),
- a step by step explanation of the IPV screening tool, and
- an explanation of phase two of the study which entails the implementation of the IPV screening tool for a three-month period.

The IPV screening tool was implemented by the participants for three months during March, April, May, June or July depending on the data collection date of phase one. The IPV screening tool was adapted by the researcher and focused on questions regarding the physical health, mental health, the history of abuse to be able to identify female IPV victims, as well as the referral services that were utilised to assist these victims. The researcher added extra questions on the IPV screening tool. Of the sections that focused on the history of the abuse, three extra questions were added. These questions focused on financial abuse and the contact that female IPV victims have with their family and friends as follows:

- Do you see you family/friends regularly?
- Are you restricted to contact your family/friends? and
- Do you experience any kind financial abuse which includes withholding money as well as taking money?

The researcher added section E on the referral of the female IPV victim as follows:

PHCF Psychologist  Social Worker  Psychiatric Professional Nurse

Secondary Hospital  Private Psychologist  Other \_\_\_\_\_

A minimum of 100 IPV screening tools were given to the PHCF. The researcher's contact details were given to the facility managers and the facility managers were encouraged to contact the researcher should the PHCF require more IPV screening tools. Furthermore, each facility manager was supplied with a master copy of the IPV screening tool should they wish to make copies of the IPV screening tool during the three-month period. None of the participating PHCF contacted the researcher requesting more IPV screening tools during the three months' period of phase two. After the completion of phase two, phase three was conducted as discussed in the following section.

### **3.2.5.5 Phase three of the research study**

The researcher conducted a post-test after the implementation of the independent variable (IPV screening tool, see Annexure 9) (Fouché, *et al.*, 2014:147). After the implementation of the IPV screening tool for a period of three months from March, April, May, June or July, the researcher conducted a post-test. The post-test evaluated the knowledge of PNS obtained in the educational session and the practices post-implementation of the IPV screening tool. The same method was applied as in phase one of the research study. The methodology of phase one in terms of population and sampling, data collection, the recruitment of the participants, post-test questionnaire, fieldworkers, data analysis and pilot study are discussed as follows:

#### **3.2.5.5.1 Population and sampling**

The same population and inclusive criteria were used as in phase one of the research study (see 3.2.5.3.1). The sample size was ( $n_2=73$ ) PNS from thirty-two PCHF of the three sub-districts of the NMBHD that participated in the research study. One of the PHCF (B15) that participated in phase one of the research study, did not participate in phase three of the research study because of the resignation of the PNS. All the PNS in PHCF (B15) were newly recruited staff that did not participate in phase one of the research study. See Table 3.4 for the participating PNS per PHCF in phase three of the research study.

**Table 3.4: Participating PNS per PHCF in phase three**

Sub-district A		Sub-district B		Sub-district C	
PHCF	Number of PNS	PHCF	Number of PNS	PHCF	Number of PNS
A 1	1	B 13	0	C26	2
A 2	1	B 14	3	C 27	2
A 3	2	B 16	3	C 28	2
A 4	3	B 17	3	C 29	1
A 5	1	B 18	5	C 30	2
A 6	3	B 19	3	C 31	2
A 7	2	B 20	1	C 32	1
A 8	3	B 21	6	C 33	1
A 9	1	B 22	4		
A10	3	B 23	0		
A 11	2	B 24	3		
A12	3	B 25	4		
<b>n= 12</b>	<b>n=25</b>	<b>n=12</b>	<b>n=35</b>	<b>n=8</b>	<b>n=13</b>

**3.2.5.5.2 Data collection**

The data collection was done in the same manner as that of phase one of the research study (refer to section 3.2.5.3.2).

**3.2.5.5.3 The recruitment of the participants**

The recruitment was done in the same manner as that of phase one of the researcher study (refer to section 3.2.5.3.2.1). However, only the participants that completed phase one and phase two of the study could participate in phase three.

**3.2.5.5.4 Post-test questionnaire**

The questions on the post-test questionnaire were the same questions as those of the pre-test questionnaire (refer to section 3.2.5.1). (Annexure 2, the post-test questionnaire).

#### **3.2.5.5.5 Fieldworkers**

The researcher appointed two fieldworkers to collect the data of phase three due to a busy schedule (refer to section 3.2.5.2 and 3.2.5.3.2.3). The PHCF was divided between the fieldworkers as follows;

- Fieldworker 2 = 12 PHCF in sub-district B and
- Fieldworker 3 = 20 PHCF in sub-district A and C.

The aim of phase three of the research study was to evaluate the knowledge of the participants obtained in the educational session and the practices of the participants' post-implementation of the screening tool. Due to a measles campaign in the communities of the NMBHD, participants were not available to conduct phase three of the research study during the month of June. Hence, the phase three started at the end of June.

After the completion of the post-test questionnaire the fieldworker thanked the participants and the facility managers for participating in the research study. The researcher analysed the post-test questionnaire as explained in the following section:

#### **3.2.5.5.6 Data analysis**

The completed post-test questionnaires by participants who had not participated in phases one and two were excluded, as indicated in section D. Out of 73 completed post-test questionnaires only data of 63 post-test questionnaires were captured as 4 were incomplete and 6 did not participate in phases one and two of the study. The same process of data capturing was used as in phase one of the research study (refer to 3.2.5.3.2.4).

#### **3.2.5.5.7 Pilot study**

The pilot study was conducted to test the post-test questionnaire (see section 3.2.5.3.2.5).

### 3.3 RELIABILITY AND VALIDITY

Reliability refers to the dependability of the questionnaire. Reliability ensures that if the same research is conducted using the same questionnaire for a second time or by different researchers the same results will be obtained (Brink, *et al.*, 2013:169). Reliability is divided into three categories, namely stability, internal consistency and equivalence reliability. Stability reliability measures if the research instrument is used for a second time that the same data is collected as for the first time; whereas internal consistency reliability focuses on the questions themselves. It enables the questions to be divided into two sections, analysed and compared to identify similarities; whereas equivalence reliability is used when more researchers work on the same observational study and use the same instrument to collect the data (Moule & Goodman, 2012:186).

In the research study, the researcher ensured reliability by conducting high quality research. The researcher requested both the supervisor and co-supervisor to evaluate the pre-and post-test questionnaires. Furthermore, the researcher conducted a pilot study to ensure that the questions were clear and that the participants understood the questions. In addition, with the pilot study the researcher ensured that the appropriate questions were asked to gather the correct information for the research study. The researcher ensured that the findings of the research study reflected the accurate data of the participants by capturing the data correctly. Therefore, the researcher requested one of her colleagues to conduct a spot check to ensure the accuracy of the data captured. Furthermore, the researcher requested an independent statistician with experience of healthcare data analysis to conduct rigorous analysis of the research data.

Validity of the research study ensures that the data collection instrument collects the specific data needed to answer the research question (Brink, *et al.*, 2013:165; Moule & Goodman, 2012:184). Validity also determines the obstacles in the research study that might influence and change the outcomes of the research study (Brink, *et al.*, 2013:111; Schmidt & Brown, 2009:129). A threat to validity is bias. Bias indicates the changes that occur in the dependent variable before the introduction of the independent variable (Schmidt & Brown, 2009:129). The researcher avoided bias by not predicting the findings of the research study (Brown, 2014:341).

Validity includes face and content validity (Brink, *et al.*, 2013:165). Face validity is also referred to as external validity (Moule & Goodman, 2012:185). The aim of face validity is to ensure that if the same study is conducted that the same results are obtained (Schmidt & Brown, 2009:129). It ensure that the data collection instrument measures the correct data that it is supposed to measure to answer the research question (Brink, *et al.*, 2013:166; Moule & Goodman, 2012:185) on the surface (Moule & Goodman, 2012:185). Face validity can be conducted by an individual or a group of people that do not necessary have knowledge on the research topic (Moule & Goodman, 2012:185).

Content validity is also referred to as internal validity (Moule & Goodman, 2012:184). Content validity focuses on the questions on the data collection instrument; whereas the questions on the questionnaire gather the data needed for the research study. Therefore, a person or a group of people who are knowledgeable about the research topic must validate the questions (Moule & Goodman, 2012:184). Content validity, ensures that the data collection instrument measures all the aspects of the variables (Brink, *et al.*, 2013:166). Content validity determines whether the independent variable is responsible for the changes in the dependent variable. In conclusion, content validity enables the researcher to answer the research question (Polit & Beck, 2009:377).

In this study, the researcher ensured face validity by soliciting critical comments from the supervisors regarding the readability and clarity of the questionnaire. Content validity was ensured by basing the questions on literature related to IPV. Furthermore, the researcher ensured that the screening tool was reviewed by a social worker, who had extensive experience with IPV.

Furthermore, the researcher ensured content validity by basing the questions of the pre-and post-test questionnaires on the literature review. In addition, the researcher requested the input of the statistician to ensure that the instrument was valid. The statistician suggested that the open-ended questions be answered in terms of priority to the participant; thus ensuring that a larger amount of data was collected. The researcher restructured the pre- and post-questionnaire according to this suggestion. Furthermore, the researcher ensured face validity by requesting the supervisors to critically analyse the pre-and post-test questionnaires. In addition, the pre-and post-test questionnaires were evaluated by two evaluators from the Departmental Research

Committee from the Nursing Science Department and the Facility Postgraduate Studies Committee at the Nelson Mandela University who are both trained in social science. The researcher adapted the pre-and post-test questionnaires according to the suggestions of the supervisors and evaluators.

In this study, the researcher refrained from bias by doing the following:

- Although a PN herself, the researcher did not have any personal relationships with any of the participants or fieldworkers since she trained in the Western Cape Province,
- It was the first time that the researcher met the participants and fieldworkers which ensured that bias was limited, and
- The researcher ensured that both fieldworkers gave the same information to the participants in the educational sessions by conducting a training session to the fieldworkers, as well as supplying them with notes. The sessions were also done in the same timeframe to avoid fatigue of participants.

### **3.4 ETHICAL CONSIDERATIONS OF THE RESEARCH STUDY**

As stated in Chapter One, in this research study the researcher has considered ethical principles to ensure a high ethical standard to the study. The researcher applied the ethical principles of beneficence, non-maleficence, autonomy and justice, as well as privacy and confidentiality and ethical permission in the research study, which is outlined as follows.

#### **3.4.1 Beneficence**

The researcher's aim when applying the principle of beneficence was to do good to the participants of the research study (Owonikoko, 2013:242; Wild, 2014:97). Through beneficence the healthcare services can be improved to enhance the total wellbeing of the patients (Brink, *et al.*, 2013:35). Beneficence also includes the value of knowledge, emphasising that participants in researcher studies want to learn more about a specific topic to benefit their patients and increase patient care (Denny & Guido, 2012:805).

The researcher or fieldworker explained to the participants that there would be no direct benefit for themselves. However, the participants benefitted from the educational session regarding IPV as the educational session equipped the participants with the knowledge to identify female IPV victims. The IPV screening tool improved the management of participants regarding IPV. Hence, female IPV victims will benefit by not only being identified but also being referred for further interventions.

### **3.4.2 Non- maleficence**

Non-maleficence refers to the prevention of harm or injuries to the participants of the research study (Denny & Guido, 2012:805; Muller, 2009:62; Wild, 2014:97). It includes the prevention of physical as well as psychological harm. Psychological harm is often the type of harm that is not easily determined. The prevention of harm included the participants' own experiences regarding the research topic. Therefore, the researcher ensured that the participants' own experiences related to the research topic did not cause harm to them at any stage of the study (Strydom, 2014c:115).

In this study, the researcher and the fieldworkers ensured that the tearooms where phase one, phase two and phase three occurred were secured and free of danger, so that no harm might occur to the participants whilst conducting the research study. Furthermore, the researcher ensured that a social worker was available at a nearby hospital should any of the participants experience IPV themselves and need referral. The researcher also ensured that the fieldworkers themselves were PNS and had basic counselling skills to assist female IPV victims immediately. Furthermore, the researcher prevented the participants from harm by not asking any questions related to the personal experiences of the participants with regard to IPV on the data collection instruments. None of the participants needed counselling.

### **3.4.3 Autonomy**

Autonomy refers to the freedom given to the participants to make their own decisions regarding the research study. The participants exercised their right to choose for themselves if they wanted to participate in the research study (Brink, *et al.*, 2013:35; Muller, 2009:62; Wild, 2014:96). The participants could rethink this decision and were informed that they could withdraw at any time during the research study (Brink, *et al.*, 2013:35).



The researcher requested the participants to complete an informed consent form before participating in the study (see Annexure 8). Nobody withdrew from the study.

#### **3.4.4 Justice**

Justice refers to the fair treatment of all the participants of the research study (Muller, 2009:63; Wild, 2014:97). It is the obligation of the researcher to provide the same benefits and opportunities to all participants in the research study (Owonikoko, 2013:242).

The researcher gave all the participants working at NMBHD the opportunity to participate in the research study. The researcher sent the fieldworker for a second or third time to certain PHCF to ensure that all the participants were given the opportunity to participate. The researcher also ensured that all information in the report was true and honest as all the information given by the participants in the educational sessions was based on the literature review. No information was given that could deceive the participants or any person who would have access to the findings. Furthermore, the researcher ensured that promises of providing feedback to the participants were maintained by giving verbal feedback to PHCF. The IPV screening tool was also provided to the facility managers of the PHCF so that the tool was available to all the participants of the PCHF in the NMBHD who could not participate in the research study.

#### **3.4.5 Privacy and confidentiality**

Privacy and confidentiality entail that all the information obtained by the researcher in the research study is not shared with another person or party that is not part of the study (Strydom, 2014c:120). Anonymity is when the researcher protects the identity of the participants. Therefore, not using any form of identity on the research instrument to avoid linking it to a specific participant was important in this research study (Moule & Goodman, 2012:64; Schmidt & Brown, 2009:229). This includes names, addresses and identification numbers of the participants (Moule & Goodman, 2012:64).

The researcher and the fieldworkers kept all the information that they obtained during the research study from the participants confidential. The questionnaires were anonymous as no names or personal details which could identify the participants were

requested. The researcher kept the consent forms separately from the completed questionnaires. Therefore, none of the consent forms could be linked to the completed questionnaires. The researcher kept all the completed questionnaires together, making it difficult to link the completed questionnaires to a specific participant.

The researcher captured the information herself ensuring that no other party had access to the information of the participants. The completed consent forms and pre-test and post-test questionnaires are kept in a locked cabinet at the Nelson Mandela University. The electronic documents such as Excel sheets with the data are kept at a password protected file that is only accessible by the researcher. These documentations will be kept for a period of five years after which the data will be destroyed. Only the researcher and supervisors have access to the completed pre- and post-test questionnaires. Furthermore, the researcher ensured confidentiality from the fieldworkers by including a confidentiality clause in the agreement that the fieldworkers signed before being accepted in the research team.

### **3.4.6 Gaining ethical permission**

To conduct a research study, the researcher first obtained ethical clearance to conduct the research study. This process normally requires the researcher to submit certain documentation regarding the research study to a committee responsible to grant the ethical permission (Strydom, 2014c:127).

The researcher obtained ethical permission to conduct the research study from the relevant facilities and institutions. The researcher requested ethical approval from the Faculty Postgraduate Studies Committee at the Nelson Mandela University. The ethics number was H16-HEA-NUR-055. (See Annexure 4, ethics clearance reference number).

Furthermore, the researcher obtained permission from the Department of Health, Eastern Cape Province, and the NMBHD to conduct the study in the primary healthcare facilities (See Annexure 5, the approval letter from the Department of Health, Eastern Cape Province, and Annexure 6, the approval letter from the NMBHD).

### **3.5 SUMMARY OF THE CHAPTER**

The research study was conducted using a quantitative, quasi-experimental one group pre-and post-test design. The study was conducted in three phases. Phase one included the completion of the pre-test questionnaire by the participants. During phase two, the researcher conducted the educational sessions to the participants and the participants implemented the IPV screening tool as the intervention for a period of three months at the various PHCF. In the last phase, phase three, the participants completed the post-test questionnaire. Reliability of the study was ensured by conducting a high quality of research, as well as a pilot study. Validity of the study was ensured by soliciting critical comments from the supervisors and statistician. Ethical considerations such as beneficence, non-maleficence, autonomy and justice in the research study were also discussed in this chapter. Chapter Four will discuss the data analysis and findings of the research study.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 INTRODUCTION**

In Chapter Three, the researcher presented the research design and methodology of the research study. In Chapter Four, the researcher will discuss the data analysis conducted by the statistician and findings of the research study. The findings of both the pre-test and post-test are discussed according to the knowledge and practices of PNS regarding IPV.

#### **4.2 DATA COLLECTION**

As discussed in Chapter Three the data was collected using self-administered pre-and post-test questionnaires. Although a total of 137 phase one questionnaires were collected from the participants, only the data of 128 participants (n=1) was captured. Nine questionnaires were incomplete and had to be discarded. A total of 73 post-test questionnaires were collected. However, only 63 (n=2) were captured as four questionnaires were incomplete and six did not participate in phases one and two of the study. Therefore, these questionnaires could not be used for data analysis. The response rate of PNS who participated in the pre-test was 64% and the post-test was 31.5%. The differences in the participation rates between the pre-test and post-test were a concern. However, they could be attributed to the following;

- PNS were very busy at the time when the post-test was completed,
- many PNS resigned, and
- PNS were moved between the various PHCF and could have been moved to the PHCF that were not participating in the study.

#### **4.3 DATA ANALYSIS**

The data analysis of the research study was conducted by a statistician working at the Nelson Mandela University using ANOVA. Prior to data analysis, the researcher met with the statistician for guidance with the data capturing process. This was followed by the researcher capturing the data using an Excel-spread sheet.

The statistician used descriptive statistics such as frequency distribution, central tendency and correlation coefficient (Brink, *et al.*, 2013:183). Inferential statistics, including Chi-square, t-test, Cohens'd and Cramér's V, were used to analyse the data. Cronbach's alpha was used to test the reliability of the pre-and post- test questionnaire (Brink, *et al.*, 2013:170; Delport & Roestenburg, 2014:177). A Cohens'd score of .20 was significant and Chi-square score of 0.16 and above was significant for this research study. The knowledge and practices scores were low; hence further testing was not feasible. As illustrated below in Table 4.1, the A Cronbach's alpha test between 0.50-0.69 is generally acceptable and good between 0.70-0.79. The Cronbach's alpha coefficients for the factors showed acceptable findings for both the pre-and post-test findings. For example, regarding knowledge, in the pre-test ( $n_1=128$ , 0,67) and post-test ( $n_2=63$ , 0,51), as well as for practices in the pre-test ( $n_1=128$ , 0,62), good results were obtained for the post-test ( $n_2=63$ , 0,73).

**Table 4.1: Cronbach's alpha coefficients**

Factor	All (n=191)	Pre-test (n=128)	Post-test (n=63)
Knowledge	0,64	0,67	0,51
Practices	0,66	0,62	0,73
KP Score	0,34	0,38	0,22

The findings of the pre- and post-test data were captured together in the categories of knowledge and practices scores. The answers of the open-ended questions were not limited to options in the pre-and post-test questionnaires; hence the PNS could give as many answers as they preferred to give. The findings of the open-ended questions (questions B8, B9, B10, B11, C6) were only categorised to correct and incorrect answers. Therefore, scores of correct and incorrect answers on those open-ended questions do not match 100% as all findings were counted. Section D on the post-test questionnaire could not be analysed inferentially because it simply shows the researcher which PNS participated in phase one of the research study, which is 63. The data obtained from the questionnaires are illustrated by charts such as pie charts, tables and clustered columns. The knowledge and practices scores were calculated as follows:

- Knowledge score = (Number of correct responses to statements B1-B7, C3 and B8-B11)/12 x 100
- Practice score = (B12-B17, C1, C2, C4, C5 and C6)/11 x 100
- Pre-test participants = (n<sub>1</sub>=128) 100%
- Post-test participants = (n<sub>2</sub>=63) 100%
- Knowledge and practices (KP) score = Central Tendency & Dispersion: Knowledge & Practices Scores (n<sub>1,2</sub> = 191)

The findings of the research study, are presented in the categories of knowledge and practices of IPV below.

#### **4.4 THE FINDINGS OF THE RESEARCH STUDY**

Polit and Beck (2014:52) stated that the results of a research study should be communicated. The researcher presented the pre-test and post-test questionnaires' findings as follows;

- Demographic data (section A),
- Knowledge regarding IPV (Section B and C), and
- Practices regarding IPV (Section B and C).

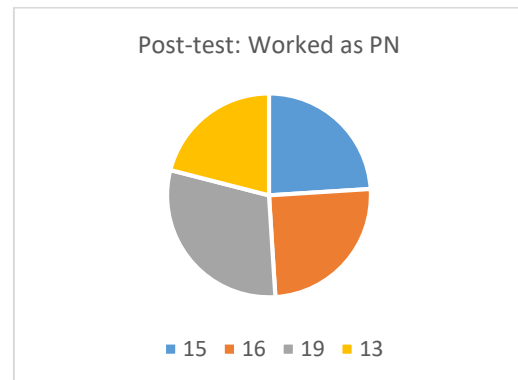
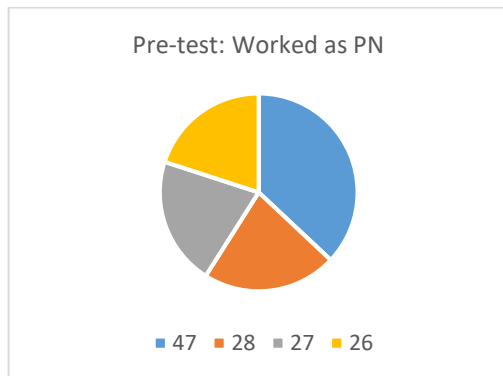
##### **4.4.1 Demographic data**

The demographic data in section A was collected using six questions that focused on the number of years that the participants worked as PNS, types of PHCF, the number of years that PNS worked in PHCF, nursing training of PNS, age of PNS and IPV training. The frequency distribution was (n<sub>1</sub>=128, 67%) for the pre-test and (n<sub>2</sub>=63, 33%) for the post-test. Below follow the pre-and post-test findings of the demographic data.

##### **4.4.1.1 *The number of years that the participants worked as PNS***

As illustrated in Figure 4.1 and Figure 4.2, the majority of participants worked more than 15 years as a PN (n<sub>1</sub>=47, 37%) in the pre-test findings and 11-15 years (n<sub>2</sub>=19, 30%) as a PN in the post-test findings. This was followed by 2-5 years (n<sub>1</sub>=28, 22%) and 11-15 years (n<sub>1</sub>=27, 21%) in the pre-test versus 2-5 years (n<sub>2</sub>=16, 25%) and more than 15 years (n<sub>2</sub>=15, 24%) in the post-test findings. The minority of participants

worked between 5-10 years ( $n_1=26$ , 20%) in the pre-test, versus between 5-10 years ( $n_2=13$ , 21%) for the post-test findings.



**Figure 4.1: PNS working experiences in years (pre-test)**

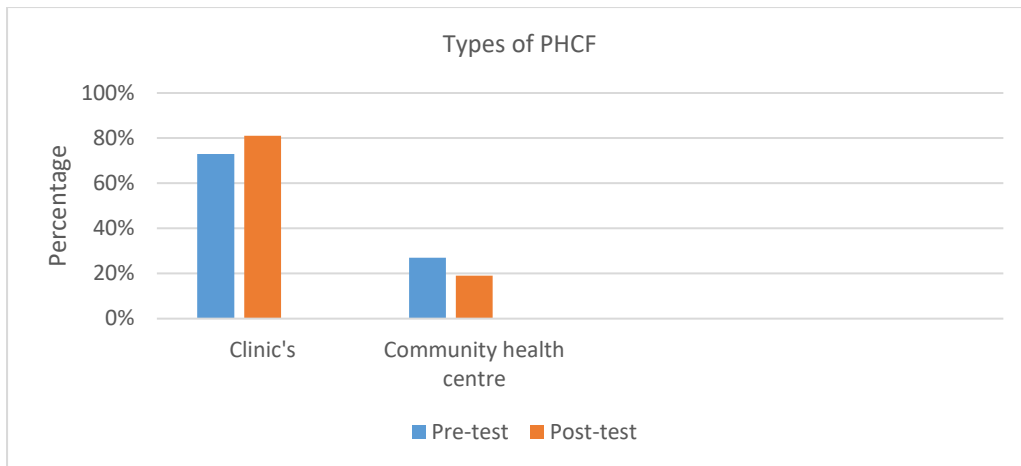
**Figure 4.2: PNS working experiences in years (post-test)**

However, no statistically significant difference was found of the number of years participants worked as PNS in the pre-test versus the post-test questionnaire ( $\chi^2(d.f.=3, n_{1,2}=191)=3.84; p=.280$ ).

In both the pre-test and post-test groups most PNS worked for more than 15 years as PNS. PNS gained a lot of experience and knowledge on the research topic, making them the ideal category of healthcare workers to identify IPV and take part in this study.

#### **4.4.1.2 Types of PHCF**

As illustrated in Figure 4.3, most participants worked in clinics in both the pre-test ( $n_1=94$ , 73%), and the post-test findings ( $n_2=51$ , 81%). The minority of participants worked in community health centres for both the pre-test ( $n_1=34$ , 27%), as well as the post-test findings ( $n_2=12$ , 19%).



**Figure 4.3: Types of PHCF**

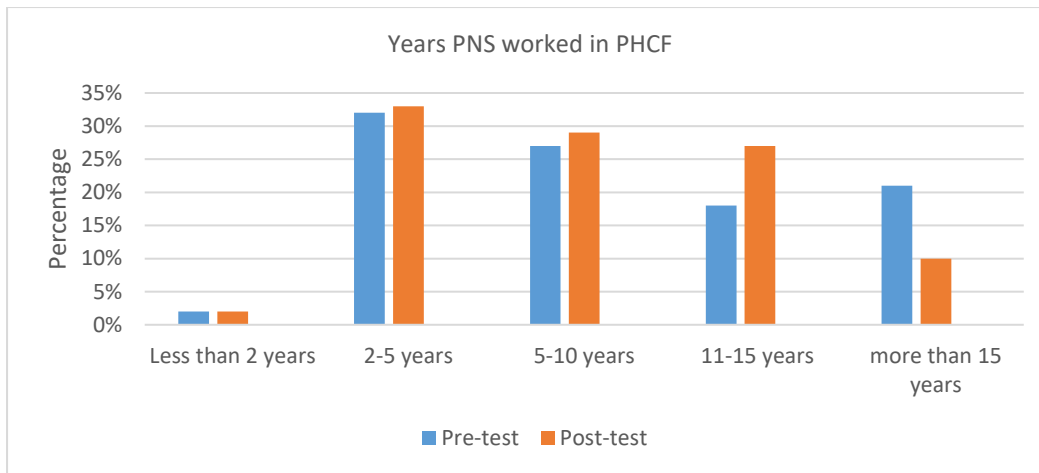
However, no statistically significant difference was found in the findings regarding types of PHCF between the pre-test and post-test questionnaires ( $\chi^2(d.f. = 1, n_{1,2} = 191) = 1.30; p = .253$ ).

The majority of PNS worked in PHCF such as clinics where they mostly worked without a doctor. Therefore, these PNS should have the knowledge to identify IPV.

#### **4.4.1.3 The number of years that PNS worked in PHCF**

As illustrated in Figure 4.4, most participants worked for 2-5 years in PHCF in both the pre-test ( $n_1=41, 32\%$ ) as well as the post-test ( $n_2=21, 33\%$ ), followed by 5-10 years for the pre-test ( $n_1=35, 27\%$ ) as well as the post-test ( $n_2=18, 29\%$ ) and more than 15 years for the pre-test ( $n_1=27, 21\%$ ) versus 11-15 years ( $n_2=17, 27\%$ ) for the post-test, this was followed by 11-15 years in the pre-test ( $n_1=23, 18\%$ ) versus and more than 15 years ( $n_2=6, 10\%$ ) in the post-test. The minority of participants worked less than 2 years ( $n_1=2, 2\%$ ) in both the pre-test as well as the post-test ( $n_2=1, 2\%$ ). Most PNS worked between 2-5 years followed by 5-10 years and above.





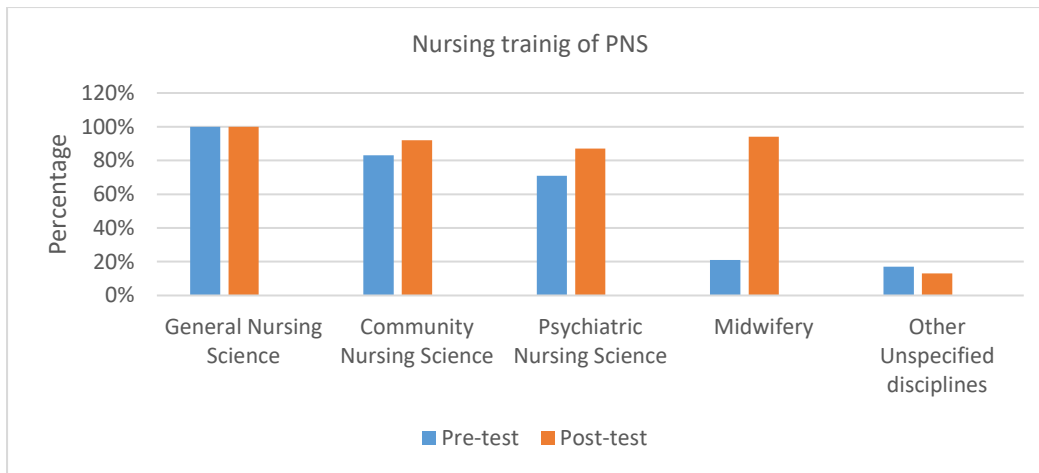
**Figure 4.4: Number of years worked in PHCF**

However, no statistically significant difference was found regarding the number of years that PNS worked in PHCF between the pre-test and post-test questionnaires, ( $\chi^2(d.f. = 4, n_{1,2} = 191) = 4.95; p = .292$ ).

Most participants in this study had a lot of experiences working in PHCF that will add to their knowledge regarding IPV and assisting female IPV victims in this regard.

#### **4.4.1.4 Nursing training of PNS**

As illustrated in Figure 4.5, most participants were trained in the four disciplines which include the basic training for PNS in South Africa in both the pre-test general nursing science ( $n_1=128, 100\%$ ), as well as post-test ( $n_2=63, 100\%$ ), followed by community nursing science in the pre-test ( $n_1=106, 83\%$ ) and post-test ( $n_2=58, 92\%$ ), psychiatric nursing science in the pre-test ( $n_1=91, 71\%$ ) and post-test ( $n_2=55, 87\%$ ) and midwifery in the pre-test ( $n_1=27, 21\%$ ) and post-test ( $n_2=59, 94\%$ ). The minority of participants were trained in other unspecified disciplines in both the pre-test ( $n_1=22, 17\%$ ) and post-test ( $n_2=8, 13\%$ ).



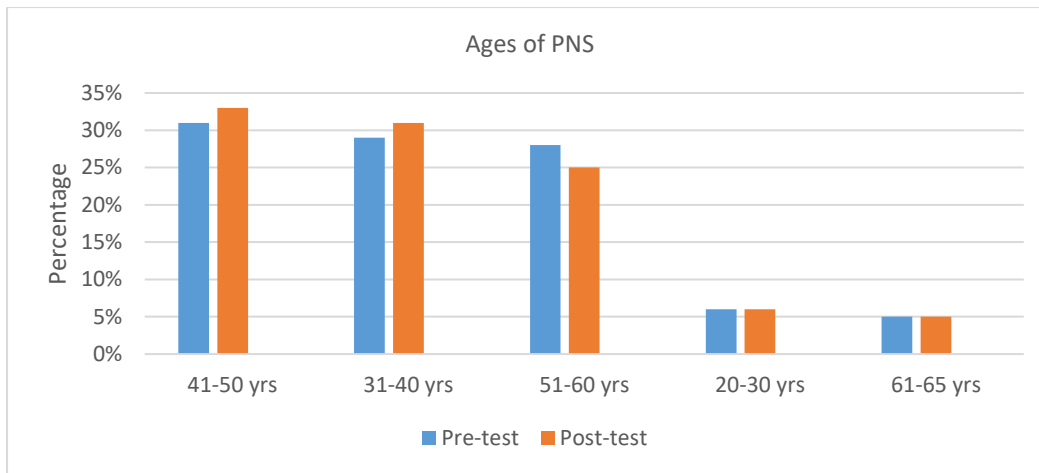
**Figure 4.5: Nursing training of PNS**

There was no statistically significant difference between the pre-test and post-test questionnaires in general nursing science  $\chi^2(d.f. = 1, n_{1,2} = 191) = 3.08; p = .079$  (1 added to each cell to meet minimum expected frequency requirements), for community nursing science  $\chi^2(d.f. = 1, n_{1,2} = 191) = 2.98; p = .084$  and the other unspecified disciplines  $\chi^2(d.f. = 1, n_{1,2} = 191) = 0.64; p = .423$ . A small statistically significant difference was found between the pre-test and post-test questionnaires in psychiatric nursing science  $\chi^2(d.f. = 1, n_{1,2} = 191) = 6.16; p = .013; V = 0.18$  and midwifery  $\chi^2(d.f. = 1, n_{1,2} = 191) = 6.75; p = .009; V = 0.19$ .

Many PNS were trained in psychiatric nursing science and are thus able to counsel female IPV victims themselves.

#### **4.4.1.5 Age of PNS**

As illustrated in Figure 4.6, most participants were between the ages of 41-50 years in both the pre-test ( $n_1=40, 31\%$ ) and the post-test ( $n_2=63, 33\%$ ), followed by 31-40 years for the pre-test ( $n_1=37, 29\%$ ), as well as the post-test ( $n_2=59, 31\%$ ), and 51-60 years for the pre-test ( $n_1=36, 28\%$ ) and post-test ( $n_2=48, 25\%$ ). The minority of participants were between the ages of 20-30 years in the pre-test ( $n_1=8, 6\%$ ), as well as the post-test ( $n_2=12, 6\%$ ), followed by 61-65 years in the pre-test ( $n_1=7, 5\%$ ) and in the post-test ( $n_2=9, 5\%$ ).



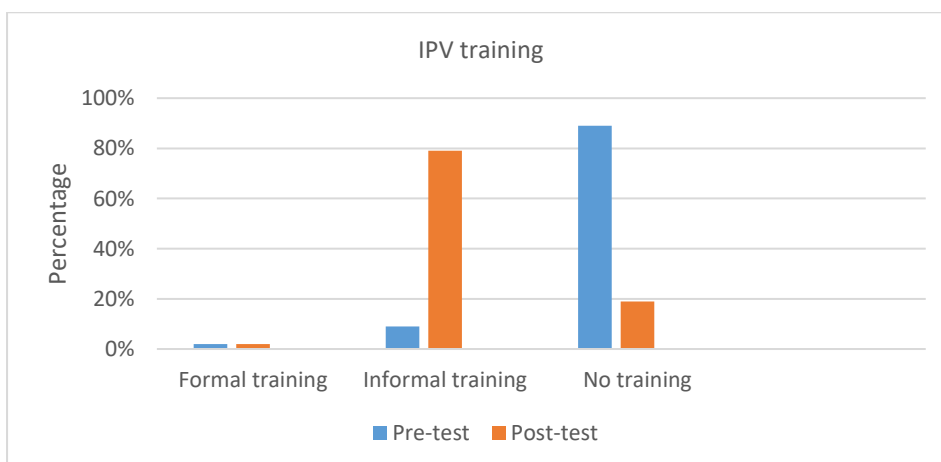
**Figure 4.6: Age of PNS**

However, no statistically significant difference was found regarding the ages of PNS between the pre-test and post-test questionnaires ( $\chi^2(d.f. = 4, n_{1,2} = 191) = 2.70; p = .608$ ).

Most PN's are between the ages of 41-50, which should give them sufficient life and work experience, as well as knowledge to identify female IPV victims.

#### 4.4.1.6 IPV training

As illustrated in Figure 4.7, most participants were not trained in the pre-test ( $n_1=112, 89\%$ ) versus the informal training that most participants received in the post-test ( $n_2=50, 79\%$ ), followed by informal training for the pre-test ( $n_1=11, 9\%$ ) versus no training in the post-test ( $n_2=12, 19\%$ ). The minority of participants were formally trained in both the pre-test ( $n_1=3, 2\%$ ) as well as the post- test ( $n_2=1, 2\%$ ).



**Figure 4.7: IPV training**

The statistically significant difference indicated a large value for IPV training between the pre-test and post-test questionnaires ( $\chi^2(d.f. = 2, n_{1,2} = 189) = 91.24; p < .0005; V = 0.69$ ).

The demographic data of the pre-test findings depicts that most of PNS received no training formally or informally. All the post-test participants received informal training by attending the educational session during phase two.

In conclusion, similarities in the demographic data could be attributed to the qualifications and the requirements for PNS working in PHCF, South African diploma and degree programmes that include all disciplines of nursing science, the majority PHCF which are clinics in the NMBHD and PNS working in PHCF for long periods of time. However, no significance was found regarding any of the demographic data between the pre-test and post-test groups.

The findings and discussion regarding the knowledge of IPV will be outlined in the sections below.

#### **4.4.2 The findings and discussions regarding knowledge of IPV**

Table 4.2, illustrates the findings of the statements in both the pre-and post-test questionnaires. In section B, seven statements (B1-B7) and in section C, one statement (C3) in the Likert-scale focused on the knowledge of IPV. The correct answers of these statements were strongly-agree and agree. The incorrect answer refers to answers given by the participants that include disagree and strongly disagree. The neutral answers, which refer to neither agree nor disagree, were not included in the findings.

**Table 4.2: The frequency of participant’s responses regarding the knowledge of IPV**

Statements	Pre-test (n <sub>1</sub> )				Post-test (n <sub>2</sub> )			
	Correct <sup>1</sup>		Incorrect <sup>2</sup>		Correct		Incorrect	
	n <sub>1</sub>	%	n <sub>1</sub>	%	n <sub>2</sub>	%	n <sub>2</sub>	%
B1. In South Africa, IPV affects mostly women	111	88%	2	2%	57	90%	0	0%
B2. IPV are under identified in PHCF	106	84%	3	2%	59	94%	0	0%
B3. Symptoms such as headaches, fatigue and, - chronic pain with no specific reason might be associated with IPV	101	79%	2	2%	59	93%	0	0%
B4. Female patients treated for social habits abuse such as alcoholism or substance abuse might be exposed to IPV	120	94%	0	0%	61	96%	0	0%
B5. I suspect that some female patients that are treated for hypertension might be exposed to IPV.	85	66%	1	1%	47	75%	0	0%
B6. I suspect that some female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed.	105	82%	0	0%	52	82%	0	0%
B7. I suspect that some female patients that are treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV.	112	88%	1	1%	59	97%	0	0%
C3. All female patients should be screened for IPV.	115	91%	1	1%	62	100%	0	0%

<sup>1</sup> The correct answers in Table 4.2 refer to the strongly-agree and agree options that were selected to answer the statements in the questionnaire

<sup>2</sup> The incorrect answers to Table 4.2 refer to the strongly-disagree and disagree options that were selected to answer the statements in the questionnaire. The neutral answers which refer to neither agree nor disagree were not reported

The findings in Table 4.2 are described as follows:

- **Statement B1. In South Africa, IPV affects mostly women**

Statement B1 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=111$ , 88%) and for the post-test ( $n_2=57$ , 90%). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=2$ , 2%) as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether IPV affects mostly women in South Africa between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 190) = 2.17; p = .704$ .

Gass, *et al.* (2010:583) and Sprague, *et al.* (2016:173) stated that IPV affects mostly women in South Africa. The majority of participants answered this statement correctly, showing that PNS are aware that IPV affects mostly women which might encourage PNS to screen for IPV.

- **Statement B2: IPV are under identified in PHCF**

Statement B2 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=106$ , 84%) and for the post-test ( $n_2=59$ , 94%). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=3$ , 2%), as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether IPV are under-identified in PHCF between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 189) = 4.29; p = .368$ .

WHO (2012a:46) stated that female IPV victims visited PHCF for treatment of problems linked to the abuse. Therefore, female IPV victims are not identified in PHCF (Alhabib, *et al.*, 2010:375). The majority of participants answered this statement correctly, meaning that PNS are aware that IPV are under-identified in PHCF that might encourage PNS to screen for IPV.

- **Statement B3. Symptoms such as headaches, fatigue and chronic pain with no specific reason might be associated with IPV**

Statement B3 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=101$ , 79%) and for the post-test ( $n_2=59$ , 93%). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=2$ , 2%),

as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether symptoms such as headaches, fatigue and chronic pain with no specific reason might be associated with IPV between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 190) = 8.95; p = .062$ .

Joyner and Mash (2012b:2) indicated that headaches, fatigue and chronic pain with no specific reason might be associated with IPV. Most participants answered this statement correctly, indicating that PNS have knowledge regarding this statement which might be due to the algorithms PNS use as a guideline to identify illnesses in adult patients.

- **Statement B4. Female patients treated for social habits abuse such as alcoholism or substance abuse might be exposed to IPV**

Statement B4 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=120$ , 94%) and for the post-test ( $n_2=61$ , 96%). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=0,0\%$ ), as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether female patients treated for social habits abuse such as alcoholism or substance abuse might be exposed to IPV between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 3, n_{1,2} = 191) = 2.45; p = .484$ .

Female IPV victims turn to substance abuse (Jina *et al.*, 2012:874; Gass, *et al.*, 2010:583) and alcohol (Wathen, *et al.*, 2008:228; Kaysen, *et al.*, 2007:1279). Most participants are aware about the link between IPV and alcohol and substance abuse, indicating that PNS have knowledge regarding this statement which might be due to the algorithms PNS use as guideline to identify illnesses in adult patients.

- **Statement B5. I suspect that some female patients that are treated for hypertension might be exposed to IPV**

Statement B5 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=85$ , 66%) and for the post-test ( $n_2=47$ , 75%). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=1$ , 1%), as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether PNS suspect that some female patients that are treated for

hypertension might be exposed to IPV between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 191) = 6.28; p = .179$ .

Hypertension might be one of the presenting illnesses that female IPV victims present with at PHCF (Mason, *et al.*, 2012:564; Vives-Cases, *et al.*, 2010:16). Most participants answered this statement correctly. The score was slightly higher in the pre-test findings indicating that PNS have knowledge regarding this statement which might be due to the algorithms PNS use as a guideline to identify illnesses in adult patients.

- **Statement B6. I suspect that some female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed**

Statement B6 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=105, 82\%$ ) and for the post-test ( $n_2=52, 82\%$ ). The minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=0,0\%$ ) as well as the post-test ( $n_2=0, 0\%$ ). However, no statistically significant difference was found whether PNS suspect that some female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 3, n_{1,2} = 191) = 1.25; p = .740$ .

Joyner and Mash (2012b:2) stated that female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed. Most participants answered this statement correctly. The score was slightly higher in the pre-test findings, indicating that PNS have knowledge regarding this statement which might be due to the algorithms PNS use as a guideline to identify illnesses in adult patients.

- **Statement B7. I suspect that some female patients that are treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV**

Statement B7 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=112, 88\%$ ) and for the post-test ( $n_2=59, 97\%$ ). The



minority of participants indicated to strongly-disagree for both the pre-test ( $n_1=1$ , 1%), as well as the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether PNS suspect that some female patients that are treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 3, n_{1,2} = 188) = 6.28; p = .099$ .

WHO (2013b:21) and Dillon, *et al.*, (2015:11) stated that female patients treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV. Most participants answered this statement correctly, indicating that PNS have knowledge regarding this statement.

- **Statement C3. All female patients should be screened for IPV**

Statement C3 was answered correctly by most participants with strongly-agree, as well as agree, for the pre-test ( $n_1=115$ , 91%) and for the post-test ( $n_2=62$ , 100%). The minority of participants opted to disagree for the pre-test ( $n_1=1$ , 1%) versus strongly-disagree in the post-test ( $n_2=0$ , 0%). However, no statistically significant difference was found whether all female patients should be screened for IPV between the pre-test and post-test questionnaires  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 188) = 6.00; p = .199$ .

Moyer (2013:483) and Grandour, *et al.* (2015:58) stated that all female patients should be screened for IPV. Most participants answered this statement correctly. The score was slightly higher in the pre-test findings, indicating that PNS agree that female IPV victims should be screened for IPV. PNS will also be willing to screen for IPV.

The open-ended questions regarding the knowledge of IPV focused on the symptoms of conditions due to IPV in both the pre- and post-test questionnaires. The questions in section B from B8-B11 focused on the symptoms of hypertension, physical abuse, emotional abuse, sexual abuse and financial abuse, depression, anxiety, substance abuse, alcohol abuse and types of substances. The findings of these questions reflect the total number of (in)correct answers, which do not correspond with the total number of participants as more than one (in)correct answer was possible per participant, as illustrated Table 4.3 below.

**Table 4.3: Open-ended questions regarding knowledge**

Variable	Pre-test		Post-test	
	Correct (%)	Incorrect (%)	Correct (%)	Incorrect (%)
B8 -Hypertension	125 (98%)	74 (58%)	61 (97%)	40 (63%)
B 9 (a) -Physical Abuse	101 (79%)	98 (77%)	52 (83%)	41 (65%)
B 9 (b) -Emotional Abuse	51 (40%)	123 (96%)	32 (51%)	60 (95%)
B 9 (c) -Sexual Abuse	69 (54%)	83 (65%)	30 (48%)	51 (81%)
B 9 (d) -Financial Abuse	61 (48%)	85 (66%)	37 (59%)	41 (65%)
B10 (a) -Depression	118 (92%)	95 (74%)	57 (90%)	43 (68%)
B10 (b) -Anxiety	95 (74%)	90 (70%)	48 (76%)	49 (78%)
B10 (c) -Substance Abuse disorder	48 (38%)	85 (66%)	31 (49%)	50 (79%)
B10(d)- Alcohol abuse	84 (66%)	89 (70%)	26 (41%)	51 (81%)
B11 -Types of Substances	96 (75%)	107 (84%)	52 (83%)	44 (70%)

The findings per question will be described as follows.

- **Question B8. Which symptoms do you associate with the medical illness, Hypertension?**

The correct answer for this question included answers such as asymptomatic, raised blood pressure reading, headaches, retinal problems as well as symptoms associated with cardiovascular diseases such as strokes and coronary heart disease which include pain in the left side of the body (section 2.5). The findings regarding question B8 show that the majority of answers were correct in both the pre-test ( $n_1=125$ , 98%), as well as the post-test ( $n_2=61$ , 97%). Incorrect answers were also both given for the pre-test ( $n_1=74$ , 58%), as well as the post-test ( $n_2=40$ , 63%). However, no statistically significant difference was found regarding this question on which symptoms do you associate with the medical illness, Hypertension between the pre-test and post-test,

$nc = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 0.11; p = .735)$  and  $nx = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 0.57; p = .452)$ .

Most participants gave correct answers to this statement with high scores in both the pre-and post-test, indicating that PNS are aware of the symptoms linked to hypertension. PNS might be able to link the symptoms to identify IPV.

- **Question B9. Which symptoms will you associate with the following types of intimate partner violence:**

- a. Physical abuse**

The correct answer for this question included answers such as bruises, scars, fractures, facial injuries, general pains (section 2.5). The findings regarding question B9(a) show that the majority of answers were correct in the pre-test ( $n_1=101, 79\%$ ), as well as the post-test ( $n_2=52, 83\%$ ). Incorrect answers were also both given for the pre-test ( $n_1=98, 77\%$ ), as well as the post-test ( $n_2=41, 65\%$ ). However, no statistically significant difference was found regarding this question on which symptoms will you associate with the following types of intimate partner violence such as physical abuse between the pre-test and post-test,  $nc = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 0.35; p = .554)$  and  $nx = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 2.81; p = .094)$ .

Most participants gave correct answers to this statement with high scores in both the pre-and post-test, indicating that PNS are aware of the symptoms of physical abuse. However, the scores for the incorrect answers were also high in the pre-test as well as the post-test which indicated a gap in knowledge. PNS can benefit from formal IPV training.

- b. Emotional abuse**

The correct answer for this question included answers associated with the symptoms of stress, depression, anxiety, post-traumatic stress disorder (section 2.5 and 2.6). The findings regarding question B9(b) show that the majority of answers were incorrect answers in the pre-test ( $n_1=123, 96\%$ ), as well as the post-test ( $n_2=60, 95\%$ ). The minority indicated correct answers for the pre-test ( $n_1=51, 40\%$ ), as well as the post-test ( $n_2=32, 51\%$ ). However, no statistically significant difference was found regarding this question on which symptoms will you associate with the following types of intimate partner violence such as emotional abuse? between the pre-test and post-test,  $nc =$

( $\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 2.06; p = .151$ ) and  $n_x = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 0.08; p = .781)$ .

Most participants gave incorrect answers to this statement, indicating that PNS are not aware of the symptoms linked to Anxiety. Therefore, PNS might find it difficult to identify IPV. The score indicated a gap in knowledge. The pre-test score was higher than in the post-test which might be due to the educational session PNS attended in phase two. However, PNS still can benefit from IPV training.

### **c. Sexual abuse**

The correct answer for this question included answers symptoms associated with gynaecological diseases such as abdominal pains, injuries to the private parts (section 2.5). The findings regarding question B9(c) show that the majority of answers were incorrect answers in the pre-test ( $n_1=83, 65\%$ ), as well the post-test ( $n_2=51, 81\%$ ). The minority indicated correct answers for the pre-test ( $n_1=69, 54\%$ ), as well as the post-test ( $n_2=30, 48\%$ ). A small statistically significant difference was found regarding this question on which symptoms will you associate with the following types of intimate partner violence such as sexual abuse in  $n_x = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 5.23; p = .022; V = 0.17$  Small). No statistically significant difference was found between the pre-test and post-test,  $n_c = (\text{Chi}^2(\text{d.f.} = 1, n_{1,2} = 191) = 0.67; p = .414)$ .

Most participants gave correct answers to this statement with high scores in both the pre- and post-test which might be due to the algorithms PNS use as guideline to identify illnesses in adult patients. However, the scores for incorrect answers were also high in the pre-test as well as the post-test which indicated a gap in knowledge. PNS can benefit from formal IPV training.

### **d. Financial abuse**

The correct answer for this question included answers that indicated withholding of resources such as monetary, food, medical, educational resources (section 2.5). The findings regarding question B9(d) shows that the majority of answers were incorrect answers in the pre-test ( $n_1=85, 66\%$ ) as well as in the post-test ( $n_2=41, 65\%$ ). The minority indicated correct answers for the pre-test ( $n_1=61, 48\%$ ) as well as the post-test ( $n_2=37, 59\%$ ). However, no statistically significant difference was found regarding this question on which symptoms will you associate with the following types of intimate

partner violence such as financial abuse between the pre-test and post-test,  $\chi^2 = 2.07$ ;  $p = .150$ ) and  $\chi^2 = 0.03$ ;  $p = .856$ ).

Most participants gave incorrect answers to this statement. The score in the pre-test was higher than in the post-test which indicated a gap of knowledge. PNS can benefit from formal IPV training.

- **Question B10. Which symptoms will you associate with the following mental disorders:**

- a. Depression**

The correct answer for this question included answers such as sadness, crying, suicidal ideation, fatigue, hopelessness, insomnia (section 2.6). The findings regarding question B10(a) show that the majority of answers were correct answers in the pre-test ( $n_1=118$ , 92%), as well as the post-test ( $n_2=57$ , 90%). The minority indicated incorrect answers for the pre-test ( $n_1=95$ , 74%), as well as the post-test ( $n_2=43$ , 68%). However, no statistically significant difference was found regarding this question on which symptoms will you associate with the following mental disorders namely depression between the pre-test and post-test,  $\chi^2 = 0.16$ ;  $p = .688$ ) and  $\chi^2 = 0.75$ ;  $p = .387$ ).

Most participants gave correct answers to this statement indicating that PNS do have knowledge. The score in the pre-test was higher than in the post-test which might be due to the algorithms PNS use as guideline to identify illnesses in adult patients. However, the score for incorrect answers was also high in the pre-test, indicating that the educational session did benefit PNS. However, there is still a gap in knowledge and PNS can still benefit from IPV training.

- b. Anxiety?**

The correct answer for this question included answers such as agitation, physical symptoms, being afraid for no reason (section 2.6). The findings regarding question B10(b) show that an equal number of participants answered correct in the pre-test ( $n_1=95$ , 74%) versus the majority incorrect answers for the post-test ( $n_2=49$ , 78%). The minority indicated incorrect answers for the pre-test ( $n_1=90$ , 70%) versus the minority correct answers for post-test ( $n_2=48$ , 76%). However, no statistically significant

difference was found regarding this question on which symptoms will you associate with the following mental disorders namely anxiety between the pre-test and post-test,  $\chi^2 = (Chi^2(d.f. = 1, n_{1,2} = 191) = 0.09; p = .768)$  and  $\eta^2 = (Chi^2(d.f. = 1, n_{1,2} = 191) = 1.19; p = .276)$ .

Most participants gave correct answers to this statement, indicating that PNS do have knowledge. The score in the pre-test was higher than in the post-test which might be due to the algorithms PNS use as a guideline to identify illnesses in adult patients. However, the score for incorrect answers was higher in the post-test which indicated a gap in knowledge. PNS can still benefit from IPV training.

### **c. Substance abuse disorder**

The correct answer for this question included answers such as hallucination, euphoria, delusions, making of new friends, lack of coping skills (section 2.6). The findings regarding question B10(c) show that the majority of answers were incorrect answers in the pre-test ( $n_1=85, 66\%$ ), as well as the post-test ( $n_2=50, 79\%$ ). The minority indicated correct answers for the pre-test ( $n_1=48, 38\%$ ), as well as the post-test ( $n_2=31, 49\%$ ). However, no statistically significant difference was found regarding this question on which symptoms will you associate with the following mental disorders namely substance abuse between the pre-test and post-test,  $\chi^2 = (Chi^2(d.f. = 1, n_{1,2} = 191) = 2.39; p = .122)$  and  $\eta^2 = (Chi^2(d.f. = 1, n_{1,2} = 191) = 3.42; p = .064)$ .

Most participants gave incorrect answers to this statement which indicated a gap in knowledge. The score of the incorrect answers was higher in the post-test. PNS can benefit from IPV training.

### **d. Alcohol abuse**

The correct answer for this question included answers such as tremors, smelling of alcohol, lack of coping skills (section 2.6). The findings regarding question B10(d) show that the majority of answers were incorrect answers in the pre-test ( $n_1=89, 70\%$ ), as well as the post-test ( $n_2=51, 81\%$ ). The minority indicated correct answers for the pre-test ( $n_1=84, 66\%$ ), as well as the post-test ( $n_2=26, 41\%$ ). A small statistically significant difference was found regarding this question on which symptoms will you associate with the following mental disorders, alcohol abuse between in the pre-test and post-test,  $\chi^2 = (Chi^2(d.f. = 1, n_{1,2} = 191) = 10.25; p = .001; V = 0.23 \text{ Small})$ . No

statistically significant difference was found regarding question B10(d) which symptoms will you associate with the following mental disorders, alcohol abuse between the pre-test and post-test,  $\chi^2(d.f. = 1, n_{1,2} = 191) = 2.81; p = .093$ .

Most participants gave incorrect answers to this statement which indicated a gap in knowledge. The score of the incorrect answers was higher in the post-test, although a small statistically significance difference was depicted between the pre-and post-test correct answers. PNS can benefits from IPV training.

- **Question B11. Which types of substances do you associate with substance abuse disorder?**

The correct answer for this question included answers such as over-the-counter medications, prescribed medications, alcohol, marijuana, cocaine, heroin and others (section 2.6). The findings regarding question B11 show that an equal number of participants answered incorrect in the pre-test ( $n_1=107, 84\%$ ) versus the correct answers for the post-test ( $n_2=52, 83\%$ ). The minority gave correct answers for the pre-test ( $n_1=96, 75\%$ ) versus incorrect answers from the post-test ( $n_2=44, 70\%$ ). A small statistically significant difference was found regarding question B11 which types of substances do you associate with substance abuse disorder between in the pre-test and post-test, and  $\chi^2(d.f. = 1, n_{1,2} = 191) = 4.82; p = .028; V = 0.16$  Small). However, no statistically significant difference was found regarding this question on which types of substances do you associate with substance abuse disorder between the pre-test and post-test  $\chi^2(d.f. = 1, n_{1,2} = 191) = 1.38; p = .241$ .

Most participants gave incorrect answers to this statement, indicating a gap in knowledge. However, the participants gave more correct answers in the post-test, indicating that PNS benefitted from the educational session conducted on phase two. However, PNS can benefit from IPV training.

In conclusion, the pre-test findings indicated that PNS have adequate knowledge regarding the Likert-scale statements of section B1-7 and section C3 except for statements B3, B5 and B6. The open-ended questions regarding knowledge (B8-B11) depicts that PNS have some IPV knowledge. The incorrect answers associated with the same questions depict a high score which indicated a gap in knowledge. Although the 20 minutes' educational session made a small statistical difference regarding the

knowledge of PNS, there is still a gap in the knowledge of PNS regarding IPV in the NMBHD.

#### **4.4.3 Findings and discussions regarding the practices of IPV**

The statements regarding the practices of IPV were in Likert-scale format and open-ended question format. As illustrated in Table 4.4, the findings regarding practices are indicated in section B from B12-B17 and section C from C1, C2, C4, C5 and C6 on the pre-and post-test questionnaires. Answers that include neither agree nor disagree were not reported.



**Table 4.4: The frequency of participants' responses regarding the practices of IPV**

Statements	Pre-test n <sub>1</sub> (%)		Post-test n <sub>2</sub> (%)	
	Correct <sup>3</sup>	Incorrect <sup>4</sup>	Correct	Incorrect
B12. Female patients are treated for Anxiety, Stress, Depression or Post Traumatic Stress Disorders at PHCF.	93 (73%)	7 (6%)	32 (52%)	2 (3%)
B13. Female patients request psychiatric medication from professional nurses at PHCF	86 (68%)	8 (6%)	34 (55%)	2 (3%)
B14. Women easily disclosed at PHCF being exposed to IPV.	9 (7%)	117 (94%)	2 (3%)	60 (97%)
B15. I ask female patients if they see their family regularly	14 (11%)	111 (88%)	6 (10%)	56 (90%)
B16. I ask female patients if they have friends.	16 (13%)	109 (86%)	7 (11%)	54 (88%)
B17. I ask female patients how often they have personal contact with their friends.	13 (10%)	113 (90%)	5 (8%)	57 (92%)
C1. During the past year, the PHCF identified female patients exposed to IPV but did not enquire further into the matter.	6 (5%)	77 (61%)	0 (0%)	52 (86%)
C2. PHCF's lack a screening tool to identify women exposed to IPV.	106 (86%)	2 (2%)	50 (82%)	1 (2%)
C4. PHCF screen female patients for IPV.	5 (4%)	118 (95%)	3 (5%)	57 (95%)
C5. PNS at PHCF utilise The World Health Organization screening questions to identify IPV among female patients	7 (6%)	117 (94%)	5 (8%)	55 (91%)
C6. Female patients exposed to IPV are referred to other services such as.	120 (94)	118 (92)	57 (90)	62 (98)

<sup>3</sup> The correct answers in Table 4.4 for B12 and B13 indicated sometimes and often, B14 never, B15 B16 B17 C4 and C5 always and C1 and C2 strongly-disagree

<sup>4</sup> The incorrect answers in Table 4.4 refers to the answer never, rarely, sometimes and often in B15, B16, B17, C4 and C5; agree, strongly-agree and disagree in C1; never in B12, B13 and B14; strongly-disagree in C2. Answers that include neither agree nor disagree were not reported

The statements according to Table 4.4 will be reported as follows.

- **Statement B12. Female patients are treated for Anxiety, Stress, Depression or Post Traumatic Stress Disorders at PHCF**

This statement was answered correctly by most participants with sometimes and often in the pre-test ( $n_1=93$ , 73%) as well as in the post-test ( $n_2=32$ , 52%). The minority of participants answered incorrectly with never ( $n_1=7$ , 6%) in the pre-test and ( $n_2=2$ , 3%) post-test. A small statistically significant difference was found regarding the question whether female patients are treated for Anxiety, Stress, Depression or Post Traumatic Stress Disorders at PHCF between the pre-test and post-test  $\chi^2(d.f. = 4, n_{1,2} = 189) = 16.00$ ;  $p = .003$ ;  $V = 0.29$ .

WHO (2013a:21) stated female IPV victims are often treated at PHCF for mental disorders. Most participants answered incorrectly to this statement which indicated a gap in practice. The score of correct answers was slightly higher in the pre-test findings which might be due to the algorithms PNS use as a guideline in the treatment of adult patients in PHCF. PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement B13. Female patients request psychiatric medication from professional nurses at PHCF**

This statement was answered correctly by most participants with sometimes and often in the pre-test ( $n_1=86$ , 88%), as well as in the post-test ( $n_2=34$ , 55%). The minority of participants answered incorrectly with never in the pre-test ( $n_1=8$ , 6%) and the post-test ( $n_2=2$ , 3%). A small statistically significant difference was found regarding the question whether female patients request psychiatric medication from professional nurses at PHCF between the pre-test and post-test,  $\chi^2(d.f. = 4, n_{1,2} = 189) = 12.34$ ;  $p = .015$ ;  $V = 0.26$ .

Joyner and Mash (2012b:2) stated female IPV victims often request psychiatric medication from PNS. Most participants answered correctly to this statement. The score of correct answers was slightly higher in the post-test findings which indicated that PNS benefitted from the educational session conducted in phase two.

- **Statement B14. Women easily disclosed at PHCF being exposed to IPV**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=117$ , 94%), as well as in the post-test ( $n_2=60$ , 97%). These answers include rarely, sometimes, often and always. The minority of participants answered correctly with never in the pre-test ( $n_1=9$ , 7%), as well as in the post-test ( $n_2=2$ , 3%). However, no statistically significant difference was found regarding the question whether women easily disclosed at PHCF being exposed to IPV between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 188) = 7.85; p = .097$ .

WHO (2013a:26) stated that women do not disclose being an IPV victim. Most participants answered incorrectly to this statement, which indicated a gap in practice. The score of correct answers, which was slightly higher in the pre-test findings, might be due to the algorithms PNS used as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement B15. I ask female patients if they see their family regularly**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=111$ , 88%), as well as in the post-test ( $n_2=56$ , 90%). These answers include never, rarely, sometimes and often. The minority of participants answered correctly with always in the pre-test ( $n_1=14$ , 11%) and in the post-test ( $n_2=6$ , 10%). However, no statistically significant difference was found regarding the question whether PNS ask female patients if they see their family regularly between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 187) = 7.53; p = .110$ .

Female IPV victims often get isolated from their families by the perpetrator (Bostock, *et al.*, 2009: 1323; Meintjies, 2014: 681). Most participants answered incorrectly to this statement which indicated a gap in practice. The score of correct answers were slightly higher in the pre-test findings which might be due to the algorithms PNS used as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement B16. I ask female patients if they have friends**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=109$ , 86%), as well as in the post-test ( $n_2=54$ , 88%). These answers include never, rarely, sometimes and often. The minority of participants answered correctly with always in the pre-test ( $n_1=16$ , 13%) and in the post-test ( $n_2=7$ , 11%). However, no statistically significant difference was found regarding the question whether PNS ask female patients if they have friends between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 186) = 7.50; p = .112$ .

Female IPV victims often get isolated from their friends (Bostock, *et al.*, 2009: 1323; Meintjies, 2014: 681). Most participants answered incorrectly to this statement which indicated a gap in practice. The score of correct answers were slightly higher in the pre-test findings which might be due to the algorithms PNS used as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement B17. I ask female patients how often they have personal contact with their friends**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=113$ , 90%), as well as in the post-test ( $n_2=57$ , 92%). These answers include never, rarely, sometimes and often. The minority of participants answered correctly with always in the pre-test ( $n_1=13$ , 10%) and in the post-test ( $n_2=5$ , 8%). However, no statistically significant difference was found regarding the question whether PNS ask female patients how often they have personal contact with their friends between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 188) = 8.26; p = .083$ .

Most participants answered incorrectly to this statement which indicated a gap in practice. The score of correct answers were slightly higher in the pre-test findings which might be due to the algorithms PNS use as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement C1. During the past year, the PHCF identified female patients exposed to IPV but did not enquire further into the matter**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=77, 61\%$ ), as well as in the post-test ( $n_2=52, 86\%$ ). These answers include agree, strongly-agree and disagree. The minority of participants answered correctly with strongly disagree in the pre-test ( $n_1=6, 5\%$ ) and in the post-test ( $n_2=0, 0\%$ ). The statistically significant difference score shows a medium rating regarding the question whether during the past year, the PHCF identified female patients exposed to IPV but did not enquire further into the matter between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 185) = 16.24; p = .003; V = 0.30$ .

Joyner and Mash (2012b:4) stated that PNS identify the symptoms of IPV but do not link it with IPV. Most participants answered incorrectly to this statement indicating a gap in practice. The score of correct answers was slightly higher in the pre-test findings which might be due to the algorithms PNS use as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement C2. PHCF's lack a screening tool to identify women exposed to IPV**

This statement was answered correctly by most participants with strongly-agree and agree in the pre-test ( $n_1=106, 86\%$ ), as well as in the post-test ( $n_2=50, 82\%$ ). The minority of participants answered incorrectly, strongly-disagree in the pre-test ( $n_1=2, 2\%$ ) and in the post-test ( $n_2=1, 2\%$ ). However, no statistically significant difference was found regarding the question whether PHCFs lack a screening tool to identify women exposed to IPV between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 184) = 0.64; p = .958$ .

PHCF lack an IPV screening tool (Joyner, 2009:266; Matseke, *et al.*, 2013:43). Most participants answered correctly to this statement. The score of correct answers was higher in the pre-test findings which might be due to the algorithms PNS use as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement C4. PHCF screen female patients for IPV**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=118$ , 95%), as well as in the post-test ( $n_2=59$ , 95%). These answers include never, rarely, sometimes and often. The minority of participants answered correctly with always in the pre-test ( $n_1=5$ , 4%), as well as in the post-test ( $n_2=3$ , 5%). A small statistically significant difference was found regarding the question PHCFs lack a screening tool to identify women exposed to IPV between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 183) = 10.80$ ;  $p = .029$ ;  $V = 0.24$ .

Most participants answered incorrectly to this statement which indicated a gap in practice. The score of correct answers was slightly higher in the pre-test findings which might be due to the algorithms PNS use as a guideline in the treatment of adult patients in PHCF as prescribed by Department of Health (2016:1). PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Statement C5. PNS at PHCF utilise The World Health Organization's screening questions to identify IPV among female patients**

This statement was answered incorrectly by most participants in the pre-test ( $n_1=117$ , 94%), as well as in the post-test ( $n_2=55$ , 91%). These answers include never, rarely, sometimes and often. The minority of participants answered correctly with always in the pre-test ( $n_1=7$ , 6%), as well as always in the post-test ( $n_2=5$ , 8%). However, no statistically significant difference was found regarding whether PNS at PHCF utilise The World Health Organization's screening questions to identify IPV among female patients between the pre-test and post-test,  $\text{Chi}^2(\text{d.f.} = 4, n_{1,2} = 184) = 8.15$ ;  $p = .086$ . Most participants are not aware of the guidelines of WHO to assist them with identifying female IPV victims.

Robinson (2010:575) stated that PNS are not aware of WHO's guidelines regarding IPV. Most participants answered incorrectly to this statement which indicated a gap in practice as they are not aware of these guidelines. The score of correct answers was higher in the post-test findings which indicated that PNS benefitted from the educational session conducted in phase two. However, PNS can benefit from IPV training which might improve the practices regarding the identification of IPV.

- **Question C6. Female patients exposed to IPV are referred to other services**

The correct answer for this question included answers such as social workers, psychologists, lay counsellors, healthcare facilities, courts, overnight shelters and the South African Police Services (refer to section 2.3). The pre-test findings of question C6 show correct answers for the pre-test ( $n_1=120$ , 94%) versus the post-test ( $n_2=57$ , 90%). Incorrect answers were for the pre-test ( $n_1=118$ , 92%) and slightly higher for the post-test ( $n_2=62$ , 98%). No statistically significant difference was found regarding whether female patients exposed to IPV referred to other services such as between the pre-test and post-test for both correct and incorrect answers,  $\chi^2 = (\chi^2(d.f. = 1, n_{1,2} = 191) = 0.67; p = .414)$  and  $\chi^2 = (\chi^2(d.f. = 1, n_{1,2} = 191) = 3.01; p = .083)$ .

The findings include referrals to the South African Police Services, doctors, psychologists, non-governmental organizations and social workers (Garcia-Moreno, *et al.*, 2015:1575; Sipamla, 2012:6) as well as social workers (Colombini, *et al.*, 2013:10; Williams, *et al.*, 2016:381). The majority of participants answered correctly to this question. The score of correct answers was higher in the pre-test findings which might be due to the algorithms PNS use as a guideline to identify illnesses in adult patients.

The researcher concludes that there is a gap in the practices of PNS regarding IPV in the NMBHD. PNS can benefit from formal IPV training to improve their practice regarding IPV.

#### 4.4.4 Knowledge versus practices score

The findings were analysed for the statistical measures central tendency and dispersion of the knowledge and practices (KP) score ( $n=191$ ). The findings are presented in Table 4.5.

**Table 4.5: Central tendency and dispersion**

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
Knowledge	8,39	2,29	0,00	7,00	10,00	10,00	10,00
Practices	2,52	2,23	0,00	1,25	1,25	3,75	10,00

The findings of the t-test depicted a small significant value for the knowledge findings between the pre-and post-test. The findings are illustrated in Table 4.6.

**Table 4.6: T-test: Knowledge and practices score**

Variable	Test	n	Mean	S.D	Difference	t	d.f.	p(d.f.=189)	Cohen's d
Knowledge	Pre	128	8,17	2,47	-0,65	-1,86	189	,064	0,29
	Post	63	8,83	1,82					Small
Practices	Pre	128	2,44	2,12	-0,24	-0,69	189	,491	0,11
	Post	63	2,68	2,45					Not

The correlation findings between knowledge and practices depicted no significant value because the values were not higher than = 300.The findings are illustrated in Table 4.7.

**Table 4.7: Correlation between knowledge and practices**

	n	Critical r	Observed r
All	191	,142	,204
Pre	128	,174	,235
Post	63	,248	,129

#### 4.5 SUMMARY OF THE CHAPTER

Descriptive and inferential statistics such as Chi-square, t-test, Cohens'd, Cronbach's alpha and Cramér's V were used to analyse the data for the research study. The data was analysed in the categories of demographic data, knowledge and practices. The Cronbach's alpha test showed acceptable findings. Although some PNS have knowledge regarding IPV and will be able to identify and refer female IPV victims, the findings indicated that the participants have some knowledge regarding IPV. However, there is a gap in the knowledge regarding intimate partner violence, as well as a gap in the practices. The 20 minutes' educational session had a small effect on the knowledge findings. The next and final chapter, Chapter Five, discussed the conclusions, limitations and recommendations of the research study.



## CHAPTER FIVE

### CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

Chapter One presented an overview of the research study. Chapter Two presented the literature review of the research study. Chapter Three presented the research design and methodology. Chapter Four presented the data analysis and findings of the research study. In Chapter Five the conclusions, limitations and recommendations of the research study are discussed based on the findings.

#### 5.2 CONCLUSIONS

IPV is as much a problem nationally as it is a problem internationally (Breiding, *et al.*, 2014:1; WHO, 2013a:38). The definition of IPV includes physical, emotional and sexual abuse (Colombini, *et al.*, 2013:8; WHO, 2013a:9; Stöckl, *et al.*, 2015:43; The Domestic Violence Act 116 of 1998:2). High prevalence of IPV against women occurs in South Africa One in five women in South Africa experienced IPV (Department of Health, 2017:54) hence the need arises to identify IPV in female victims in PHCF.

The research study had three objectives as follows:

- To determine the current knowledge and practices of PNS to identify IPV
- To introduce an IPV screening tool that will focus on the identification of IPV
- To evaluate the knowledge of the PNS obtained in the educational session and the practices post-implementation of the IPV screening tool.

The research study was conducted in three phases aligned with the research objectives as follows:

The first objective was achieved in phase one of the research study by determining the current knowledge and practices of PNS to identify IPV. Phase one was conducted using a pre-test self-administered questionnaire. A total of 128 participants completed the pre-test questionnaire. The findings indicated that PNS have adequate knowledge regarding the Likert-scale statements of section B1-7 and section C3 except for the following statements:

- Statement B3. Symptoms such as headaches, fatigue and chronic pain with no specific reason might be associated with IPV.
- Statement B5. I suspect that some female patients that are treated for hypertension might be exposed to IPV.
- Statement B6. I suspect that some female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed.

The open-ended questions regarding knowledge (B8-B11) showed PNS contains knowledge about IPV. The researcher observed that the correct answers were directly linked to the guideline PNS use to identify illnesses in adult patients (Department of Health, 2016:1). However, the incorrect answer score was high, indicating a gap in knowledge as well as practice. Furthermore, the IPV practices' score indicated that PNS do not screen or enquire about IPV. PNS agreed an IPV screening tool is lacking in NMBHD. The findings indicated that PNS can benefit from formal IPV training.

The second objective was achieved in phase two of the research study by introducing an IPV screening tool that focused on the identification of IPV to PNS. The researcher and fieldworkers conducted a 20 minutes' educational session with PNS that completed the pre-test questionnaire. The educational session focused on information regarding IPV as discussed in Chapter Two and explaining the IPV screening tool. PNS implemented the IPV screening tool at the various PHCF for a three-month period from March, April, June or July, depending when phase one was conducted in the PHCF.

The third objective was achieved in phase three of the research study by evaluating the knowledge of the PNS obtained in the educational session and the practices post-implementation of the IPV screening tool. Phase three was conducted using a post-test self-administered questionnaire. The same questions were asked in both pre-test and post-test questionnaires except for section D. Section D was added on the post-test questionnaire to ensure that the participants completed the pre-test questionnaire and attended the educational session. A total of 63 participants completed the post-test questionnaires. The participation rate was low for the post-test because the participants were busy with their daily tasks and could not all participate. The findings

indicated that PNS have knowledge regarding the Likert-scale statements of section B1-7 and section C3 except for the following statements:

- Statement B5. I suspect that some female patients that are treated for hypertension might be exposed to IPV.
- Statement B6. I suspect that some female patients requesting psychiatric medication such as tranquilizers from PNS are exposed to IPV without being diagnosed.

Although the correct answers of the open-ended questions regarding knowledge showed high scores, the incorrect answers also depicted high scores. Once again, this indicated a gap in knowledge, as well as practice. Many of the scores in the pre-test were higher than in the post-test which might be due to fatigue of PNS whilst conducting phase three as most of the sessions were conducted after 15H00. As the scores were generally low, PNS can benefit from formal IPV training in the NMBHD.

The findings of the t-test depicted a small significant value for the knowledge findings between the pre- and post-test. The correlation findings depicted no significant value. The Cronbach's alphas coefficients for the factors depicted acceptable findings for the pre-test knowledge and practices scores, acceptable results for the post-test knowledge score and good results for the post-test practices score.

The research study created awareness amongst PNS in PHCF regarding the research topic, as well as IPV screening. PNS in the NMBHD were knowledgeable regarding IPV, as well as the symptoms of the illnesses linked to IPV. Their knowledge might have been gained through life and work experiences as most of the participants worked between 5-15 years in PHCF and were between the ages of 41-50 years. The researcher concludes that PNS have knowledge regarding IPV which might be linked to the algorithms prescribed by Department of Health that PNS use as a guideline to identify illnesses in adult patients in PHCF in the NMBHD (Department of Health, 2016:1). Furthermore, the findings of this study agreed with findings of other research studies conducted in this field that PHCF need to screen female patients for IPV (Almutairi, *et al.*, 2013:93; Williams, *et al.*, 2016:381). However, there are gaps in knowledge and practice which can be improved through formal IPV training. However, there is still a gap in both the knowledge and practice in NMBHD. The findings of this

study agreed with findings of other research studies conducted in this that PNS received inadequate training regarding IPV (Beynon, *et al.*, 2012:973; Nyame, *et al.*, 2013:541; Waalen, *et al.*, 2000:235). As stated by previous researchers, PNS need formal training as part of the basic qualification to be able to identify female IPV victims (Alhabib, *et al.*, 2010:375; Bull, 2009:620; Vieira, *et al.*, 2012:247; Nyame, *et al.*, 2013:541; Goicolea, *et al.*, 2013: 44; Wong & Mellor, 2014:176; WHO, 2012a:46).

### **5.3 THEORETICAL FRAMEWORK**

The goal of complexity theory is to bring good stimuli into the system to change and enhance its environment (Byrne & Callaghan, 2014:26). The stimuli can occur pro-actively or retrospectively (Norberg & Cumming, 2008:280) Complexity theory in health care allows small changes in the system (Curtis & Riva, 2010:216) to change the bigger system (Grol, Bosch, Hulscher, Eccles & Wensing, 2007:119). The changes can occur through education (Norberg & Cumming, 2008:2).

Health care in South Africa is rendered on three levels of which PHCF and the community form part of the small system that feeds in the NMBHD, the large system. PNS connect the two systems and is in a perfect position to implement the changes (Byrne & Callaghan, 2014:3). Through introducing the IPV screening tool to PNS for implementation, the researcher changed the small system (PHCF and community) by creating more awareness on the research topic. PNS will be able to implement the IPV screening tool, identify female IPV victims and refer them for further assistance.

Grol, *et al.* (2007:119) stated small intervention should be implemented in the small system that positively influences the large system. According to Plsek and Wilson (2001:746) both the large and small systems have one objective which the small system tries to achieve. PNS were trained on the topic of IPV to increase their knowledge and practices to identify IPV so that more female IPV victims can be identified, referred and properly managed in the NMBHD healthcare system. The researcher first studied the large system (NMBHD) and identified the lack of IPV screening for female IPV victims. By conducting the study in the NMBHD, the objective was met as a small significance was found between the pre- and post-test regarding knowledge of PNS to identify IPV.

#### 5.4 LIMITATIONS OF THE RESEARCH STUDY

The following limitations were identified in this research study:

- Only PNS working in the acute primary care discipline participated in the research study. However, PNS working in the other disciplines such as the midwifery section in PHCF were excluded from the research study. These PNS also treat female patients that might be IPV victims. Therefore, all the PNS working under the umbrella of the primary healthcare sector should have been included in the research study.
- The independent variable was implemented for a period of three months without the researcher visiting the PHCF during this period. Due to financial constraints the researcher herself or fieldworkers could not visit the PHCF during this period. Follow-up visits could have given different results as the researcher could have encouraged the PNS to utilise the IPV screening tool more efficiently.
- The educational session lasted 20 minutes, which was insufficient. Adequate time such as a two-to-five-day workshop away from the PHCF could have improved the findings of the research study.
- Conducting the educational sessions at the PHCF was not an ideal situation. PNS could not give their full attention to the educational sessions as there were still patients in the PHCF that needed assistance from the PNS. If the educational session was conducted in a venue away from the PHCF, the findings observed might have been different. However, this was not possible due to a limited budget of the researcher and this could have caused inconvenience to PNS in order to travel which could have influenced the participation rate as well as the PHCF could have interrupted the care provided.
- The low response rate for the post-test was a concern. The researcher could have encouraged PHCF, as well as PNS, to participate in phase three by following up. However, this was not possible due to time constraints.
- The post-test questionnaire should not have been in the same format as the pre-test questionnaire. The researcher should have changed the format of the questions on the post-test questionnaire which could have influenced the findings. However, the researcher wanted to make comparisons. Furthermore,

the open-ended questions were more difficult to answer and the limited space on the questionnaire did not allow the participants to give more answers. Recommendations for further research with an adapted questionnaire are made.

- The pre- and post-test questionnaire did not make provision for the participants to evaluate the user-friendliness of the instrument as the scope of the study was limited to obtain knowledge and practices on IPV only. Furthermore, the open-ended questions were more difficult to answer and the limited space on the questionnaire did not allow the participants to give more answers. Recommendations for further research with an adapted questionnaire are made.
- The researcher did not test the educational session in the pilot study. If it was tested the researcher could have made changes on the information which might have changed the findings of phase three. However, the educational session was reviewed by the supervisors and members of the ethical committee of the University.

## **5.5 RECOMMENDATIONS OF THE RESEARCH STUDY**

The following are recommendations for further studies in the Eastern Cape Province:

### **5.5.1 Practice**

- An IPV screening tool should be implemented by all PNS working in the PHCF and hospitals for a period between 6 months to a year in order to evaluate the effect and the usage of the screening tool.

### **5.5.2 Research**

- The Cronbach findings of the research study were acceptable and the knowledge and practices were acceptable. A similar research study should be conducted for further testing in all the PHCF in the Department of Health, Eastern Cape region, including analysis of the questionnaire.
- The pre-and post-test questionnaire should make provision for the participants to evaluate the user-friendliness of the instrument. Adjustments should be

made related to open-ended questions and the format of the pre-test versus the post-test, which should be piloted prior to commencing the data collection.

- All the PNS working in the PCHF, as well as PNS based in hospitals, should be included in the research study.
- A section for the perspective of male and female (in hetero and same-sex relationships) that experience IPV should be added on the IPV screening tool.

### **5.5.3 Education**

- Formal training on the topic of IPV should be given to PNS over a longer period, in a two-to-five-day workshop.
- Regular IPV in-service training should be given to PNS working in the healthcare system.
- IPV training should be included the nursing curriculum in South Africa.

## **5.6 SUMMARY OF THE CHAPTER**

Robinson (2010:575) stated that PNS lack knowledge to be able to identify IPV in female victims. An IPV screening should be implemented in PHCF (Joyner, 2009:266; Matseke, *et al.*, 2013:43). PNS will benefit from formal IPV training (Rees, *et al.*, 2014:557; Garcia-Moreno, *et al.*, 2015:1574). The findings of the research study indicated that PNS do not always have the knowledge and practices to be able to identify IPV. Although, the IPV screening tool was implemented by PNS, they indicated that the PHCF in the NMBHD lacks an IPV screening tool to assist them to identify IPV in female IPV victims. The researcher recommends formal training to PNS to enable them to identify IPV in PHCF in the NMBHD.

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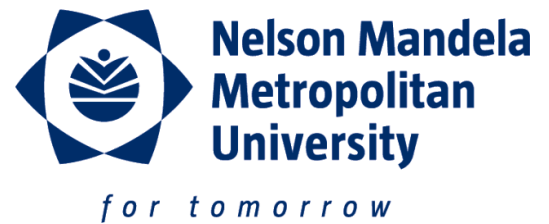
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## ANNEXURE 1: PRE-TEST QUESTIONNAIRE

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1 February 2017

Dear Participant

**RE: Knowledge and practices of primary health care professional nurses:  
Screening and identification of intimate partner violence**

The purpose of the study is to determine the current knowledge and practices of professional nurses about intimate partner violence and to implement a screening tool for the identification of intimate partner violence in primary health care facilities in the Nelson Mandela Bay Health District.

The questionnaire is anonymous and will take 10 minutes to complete. All the information obtained from the questionnaire will be confidential. The completed questionnaires will be kept safe and secure at the Department of Nursing Science at the NMMU.

Please complete the pre-test questionnaire as the last stage of the above research study.

Thank you for participating in the study.

Yours sincerely,

R.Felix

**PLEASE TICK WITH AN X:**

**Section A: Demographic questions**

1. How long have you been working as a professional nurse?

6 months-2 year's    2-5 years    5-10 years    11-15 years

more than 15 years

2. In which type of primary healthcare facility are you working?

Clinic    Community healthcare centre

3. How long have you been working in the PHCF?

6 months-2 year's    2-5 years    5-10 years    11-15 years

more than 15 years

4. In which disciplines of Nursing Science are you trained?

General Nursing Science    Community Nursing Science

Psychiatric Nursing Science    Midwifery    Other disciplines

5. How old are you?

20-30    31-40    41-50    51-60    61-65

6. Did you receive any previous training, formally or informally on the topic of IPV?

Yes, formally    Yes, informally    No

**Section B: Identifying Intimate Partner Violence (IPV)**

**Please indicate to what extent you agree or disagree with the following statements:**

Statement	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
In South Africa, IPV affects mostly women.					
IPV are under identified in PHCF					
Symptoms such as headaches, fatigue and, - chronic pain with no specific reason might be associated with IPV.					
Female patients treated for social habits abuse such as alcoholism or substance abuse might be exposed to IPV.					
I suspect that some female patients that are treated for hypertension might be exposed to IPV.					
I suspect that some female patients requesting psychiatric medication such as tranquilizer's from PNS are exposed to IPV without being diagnosed.					

Statement	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
I suspect that some female patients that are treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV.					

**Open questions: Please arrange your answer in order of priority**

1. Which symptoms do you associate with the medical illness, Hypertension:

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2. Which symptoms will you associate with the following types of intimate partner violence:

a. Physical abuse

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b. Emotional abuse

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c. Sexual abuse

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d. Financial abuse

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3. Which symptoms will you associate with the following mental disorders:

a. Depression

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b. Anxiety

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a. Substance abuse disorders

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b. Alcohol disorder

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4. Which types of substances do you associate with substance abuse disorder:

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**Please indicate to what extent the following statements occurs at PHCF:**

<b>Statement</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
Female patients are treated for Anxiety, Stress, Depression or Post Traumatic Stress Disorders at PHCF.					
Female patients request psychiatric medication from professional nurses at PHCF.					
Women easily disclosed at PHCF being exposed to IPV.					
I ask female patients if they see their family regularly.					
I ask female patients if they have friends.					
I ask female patients how often they have personal contact with their friends.					

**Section C: Screening tool for intimate partner violence**

Please indicate to what extent you agree or disagree with the following statements:

Statement	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
During the past year, the PHCF identified female patients exposed to IPV but did not enquired further into the matter.					
PHCF's lack a screening tool to identify women exposed to IPV.					
All female patients should be screened for IPV.					

Please indicate to what extent the following statements occurs at PHCF:

Statement	Never	Rarely	Sometimes	Often	Always
PHCF screen female patients for IPV.					
PNS at PHCF utilise The World Health Organisation screening questions to identify IPV among female patients.					

**Open questions: Please complete the following sentence and arrange your answer in order of priority**

1. Female patients exposed to IPV are referred to other services such as,

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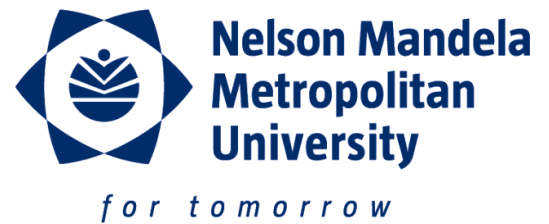
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## ANNEXURE 2: POST-TEST QUESTIONNAIRE

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• Port Elizabeth • 6031 • South Africa • [www.nmmu.ac.za](http://www.nmmu.ac.za)



Mrs R. Felix  
54 Constance Road  
Port Elizabeth  
6070  
Mobile: 0792169620  
[Rehanna.felix@nmmu.ac.za](mailto:Rehanna.felix@nmmu.ac.za)  
1 June 2017

Dear Participant

**RE: Knowledge and practices of primary health care professional nurses:  
Screening and identification of intimate partner violence**

The purpose of the study is to determine the current knowledge and practices of professional nurses about intimate partner violence and to implement a screening tool for the identification of intimate partner violence in primary health care facilities in the Nelson Mandela Bay Health District.

The questionnaire is anonymous and will take 10 minutes to complete. All the information obtained from the questionnaire will be confidential. The completed questionnaires will be kept safe and secure at the Department of Nursing Science at the NMMU.

Please complete the post-test questionnaire as the last stage of the above research study.

Thank you for participating in the study.

Yours sincerely,

R.Felix

**PLEASE TICK WITH AN X:**

**Section A: Demographic questions**

1. How long have you been working as a professional nurse?

6 months-2 year's    2-5 years    5-10 years    11-15 years

more than 15 years

2. In which type of primary healthcare facility are you working?

Clinic    Community healthcare centre

3. How long have you been working in the PHCF?

6 months-2 year's    2-5 years    5-10 years    11-15 years

more than 15 years

4. In which disciplines of Nursing Science are you trained?

General Nursing Science    Community Nursing Science

Psychiatric Nursing Science    Midwifery    Other disciplines

5. How old are you?

20-30    31-40    41-50    51-60    61-65

6. Did you receive any previous training, formally or informally on the topic of IPV?

Yes, formally    Yes, informally    No

**Section B: Identifying Intimate Partner Violence (IPV)**

**Please indicate to what extent you agree or disagree with the following statements:**

<b>Statement</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither agree or disagree</b>	<b>Disagree</b>	<b>Strongly disagree</b>
In South Africa, IPV affects mostly women.					
IPV are under identified in PHCF					
Symptoms such as headaches, fatigue and, - chronic pain with no specific reason might be associated with IPV.					
Female patients treated for social habits abuse such as alcoholism or substance abuse might be exposed to IPV.					
I suspect that some female patients that are treated for hypertension might be exposed to IPV.					
I suspect that some female patients requesting psychiatric medication such as tranquilizer's from PNS are exposed to IPV without being diagnosed.					

Statement	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
I suspect that some female patients that are treated for mental illnesses such as Anxiety, Stress, Depression or Post Traumatic Stress Disorders might be exposed to IPV.					

**Open questions: Please arrange your answer in the order of priority**

1. Which symptoms do you associate with the medical illness, Hypertension:

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2. Which symptoms will you associate with the following types of intimate partner violence:

a. Physical abuse

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b. Emotional abuse

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c. Sexual abuse

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d. Financial abuse

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3. Which symptoms will you associate with the following mental disorders:

a. Depression

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b. Anxiety

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c. Substance abuse disorders

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d. Alcohol disorder

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e. Which types of substances do you associate with substance abuse disorder:

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**Please indicate to what extent the following statements occur at PHCF:**

<b>Statement</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
Female patients are treated for Anxiety, Stress, Depression or Post Traumatic Stress Disorders at PHCF.					
Female patients request psychiatric medication from professional nurses at PHCF.					
Women easily disclosed at PHCF being exposed to IPV.					
I ask female patients if they see their family regularly.					
I ask female patients if they have friends.					
I ask female patients how often they have personal contact with their friends.					

**Section C: Screening tool for intimate partner violence**

Please indicate to what extent you agree or disagree with the following statements:

Statement	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
During the past three months, the PHCF identified female patients exposed to IPV and referred them for further treatment.					
PHCF's lack a screening tool to identify women exposed to IPV.					
All female patients should be screened for IPV.					

Please indicate to what extent the following statements occur at PHCF:

Statement	Never	Rarely	Sometimes	Often	Always
PHCF screen female patients for IPV.					
PNS at PHCF utilise The World Health Organisation screening questions to identify IPV among female patients.					

**Open questions: Please complete the following sentence and arrange your answer in the order of priority**

1. Female patients exposed to IPV are referred to other services such as,

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**Section D:**

1. Did you complete the pre-test questionnaire?

Yes

No

2. Did you attend the educational session conducted in your PHCF regarding IPV?

Yes

No

### **ANNEXURE 3: THE FIELDWORKER'S AGREEMENT**

The knowledge and practices of professional nurses in primary healthcare facilities for the early identification of intimate partner violence against women: A screening tool

I..... agree to be a fieldworker in the above-mentioned study. I agreed on all the following:

- to conduct phase 1 and 2 of the research study, namely the pre-test and educational sessions at the primary healthcare facilities (PHCF) allocated to me by the researcher,
- to collect accurate data for the study,
- to follow the steps of the sessions step by step as explained to by the researcher,
- to conduct the sessions in the 30 timeslots that the PHCF allocated to me,
- to keep all the information regarding the study and the data collected confidential and safe,
- to submit the completed pre-test questionnaires to the researcher on a weekly basis.

Date:..... Fieldworker.....

I ..... the researcher agreed to remunerate the fieldworker as follows;

- R140,00 per PHCF for an hour session with the professional nurses at each facility,
- To remunerate a once only petrol allowance of R500 at the end of April and August if phase 1 ,2 and 3 are completed, and
- To remunerate the fieldworker at the end of each month for the work completed in the month.

Date:..... Researcher:.....

## ANNEXURE 4: ETHICS CLEARANCE REFERENCE NUMBER



Copies to:  
Supervisor: Prof N Strumpher  
Co-supervisor: Dr W Ten-Ham Baloyi

Summerstrand South  
Faculty of Health Sciences  
Tel. +27 (0)41 504 2956 Fax. +27 (0)41 504 9324  
Marilyn.Afrikaner@nmmu.ac.za

Student number: 214360865

Contact person: Ms M Afrikaner

15 December 2016

Ms R Felix  
54 Constance Road  
Broadwood  
Port Elizabeth  
6070

### FINAL RESEARCH/PROJECT PROPOSAL:

QUALIFICATION: MASTER OF NURSING SCIENCE (RESEARCH)  
TITLE: THE KNOWLEDGE AND PRACTICES OF PROFESSIONAL NURSES IN PRIMARY HEALTHCARE FACILITIES FOR THE EARLY IDENTIFICATION OF INTIMATE PARTNER VIOLENCE AGAINST WOMEN: A SCREENING TOOL

Please be advised that your final research project was approved by the Faculty Postgraduate Studies Committee (FPGSC) subject to the following amendments/recommendations being made to the satisfaction of your Supervisor/s:

### COMMENTS/RECOMMENDATIONS:

1. The proposal reads well, but could be improved through the services of a proof reader, to correct minor linguistic errors.
2. The screening tool should explain what PHCF and IPV stands for. Proofread the screening tool and checklist for minor grammatical mistakes.
3. The sample size in the proposal is different to the REC-H form.
4. The budget total is incorrect.

Please be informed that this is a summary of deliberations that you must discuss with your Supervisor/s.

FPGSC grants ethics approval. The ethics clearance reference number is H16-HEA-NUR-055 and is valid for three years.

We wish you well with the project.

Kind regards,

**Ms M Afrikaner**  
Faculty Postgraduate Studies Committee (FPGSC) Secretariat  
Faculty Administration  
Faculty of Health Sciences

## ANNEXURE 5: APPROVAL LETTER, DEPARTMENT OF HEALTH, EASTERN CAPE



### Eastern Cape Department of Health

Enquiries: Madoda Xokwe  
Date: 12 January 2017  
e-mail address: madoda.xokwe@echealth.gov.za

TelNo: 040 608 0856  
Fax No: 043 642 1409

Dear Mrs. R. Felix

**Re: The Knowledge and Practices of Professional Nurses in Primary Healthcare Facilities for the Early Identification of Intimate Partner Violence against Women: A screening tool (EC\_2017RP12\_475)**

The Department of Health would like to inform you that your application for conducting a research on the above mentioned topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.
2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.
3. The Department of Health expects you to provide a progress on your study every 3 months (from date you received this letter) in writing.
4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Epidemiological Research & Surveillance Management. You may be invited to the department to come and present your research findings with your implementable recommendations.
5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.


Your compliance in this regard will be highly appreciated.

SECRETARIAT: EASTERN CAPE HEALTH RESEARCH COMMITTEE





## ANNEXURE 6: APPROVAL LETTER, NELSON MANDELA BAY HEALTH DISTRICT

	Province of the  EASTERN CAPE  HEALTH	Office of the District Manager Nelson Mandela day Health District Private Bag X 28000, Greenacres, Port Elizabeth. 6057. REPUBLIC OF SOUTH AFRICA
Enquiries : Dr LPMAYEKISO Telephone : 041-391-8173 Facsimile : 041-391-8133 E-mail : mbasa.mayekiso@gmail.com		Our Reference: RESEARCH/FELIX/17 Your Reference: Date: 30 JANUARY 2077

MS R FELIX  
 54 CONSTANCE  
 ROAD PORT  
 ELIZABETH 6070

REQUEST FOR PERMISSION TO DO RESEARCH ON "THE KNOWLEDGE AND PRACTICES OF PROFESSIONAL NURSES IN PRIMARY HEALTHCARE FACILITIES FOR THE EARLY IDENTIFICATION OF INTIMATE PARTNER VIOLENCE AGAINST WOMEN: A SCREENING TOOL."

In response to your application for permission to conduct the above research, permission is hereby granted with the following proviso:

- Health service delivery should not be disrupted under any circumstances.
- Timeous appointments must be made with the relevant persons prior to commencement of interviews/visits.
- All required data should be collected by the Researcher or a designated fieldworker (whose names should be forwarded to the relevant Sub District Coordinators prior to data collection). The Sub District Coordinators Messrs Msutu — 083 378 1942, Koll — 060 563 1225 and Reuters - 060 557 9732 should be contacted before your visit and this letter is to be presented when visiting the facilities.

The Nelson Mandela Bay Health District, as the research site, will expect a copy of the final research report when the study is completed. If the duration of the research period is required to be extended, the District Office (District Manager) should be informed accordingly.

This Office would like to wish you well in your research study.

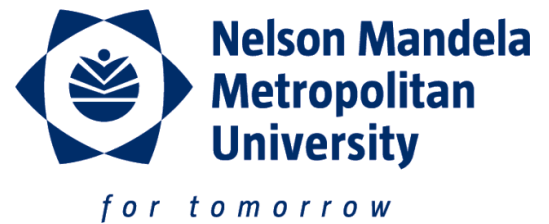


**Dr R. Nguatchuong Kon**  
 Dept of Health (SA)  
 MD (Belgium) Dp Obs(SA), DA(SA)  
 M.P. 0448 044 P.No.: 000 2637  
 romzacom@me.com

DR LPMAYEKISO  
 CLINICAL GOVERNANCE MANAGER - NMBHD

## ANNEXURE 7: INFORMATION LETTER TO THE PARTICIPANTS

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• Port Elizabeth • 6031 • South Africa • [www.nmmu.ac.za](http://www.nmmu.ac.za)



Mrs R. Felix  
54 Constance Road  
Port Elizabeth  
6070  
Mobile: 0792169620  
[Rehanna.felix@nmmu.ac.za](mailto:Rehanna.felix@nmmu.ac.za)  
1 February 2017

Dear Participant

### **INFORMATION REGARDING A RESEARCH PROJECT IN PRIMARY HEALTHCARE FACILITIES IN THE NELSON MANDELA BAY HEALTH DISTRICT**

I, Rehanna Felix, am a Masters Curationis student in Psychiatric Nursing Science at the Nelson Mandela Metropolitan University (NMMU) in Port Elizabeth. The research I wish to conduct for my degree is titled:

#### **The knowledge and practices of professional nurses in primary healthcare facilities for the early identification of intimate partner violence against women: A screening tool**

The research is being conducted under the supervision of Professor J. Strümpher and Dr. W. ten Ham-Baloyi at the Department of Nursing Science at the NMMU.

The purpose of the study is to determine the current knowledge and practices of professional nurses about intimate partner violence and to introduce an intimate partner violence screening tool for the early identification of intimate partner violence in primary healthcare facilities in the Nelson Mandela Bay Health District. Hence, I am seeking your assistance to participate in this study that will consist of a pre-test, intervention and post-test.

To ensure that a high ethical standard is kept in the study, ethical permission was obtained from the Department of Nursing Science as well as the Faculty of Health Science at the NMMU. The participants will not be coerced to participate in the study and may withdraw at any time. The information obtained from the participants will be confidential. The questionnaires will be anonymous. The completed questionnaires will be kept safe and secure at the Department of Nursing Science at the NMMU.

Upon completion of the study, I undertake to provide your institution with feedback of the research report.

If you require any further information, please do not hesitate to contact us on:

Professor J. Strümpher and Dr. W. ten Ham-Baloyi:

041 504 2965

Rehanna Felix

Mobile: 0792169620

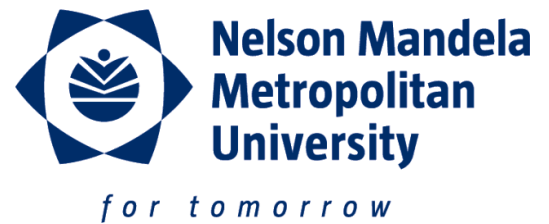
Thank you for your time and consideration in this matter.

Yours sincerely,

R.T. Felix

## ANNEXURE 8: CONSENT FORM

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### **RE: REQUEST FOR PERMISSION TO COMPLETE A RESEARCH PROJECT IN PRIMARY HEALTHCARE FACILITIES IN THE NELSON MANDELA BAY HEALTH DISTRICT**

#### ***The knowledge and practices of professional nurses in primary healthcare facilities for the early identification of intimate partner violence against women: A screening tool***

I hereby give my consent to participate in the above-mentioned research study by completing two questionnaires and attending a feedback session on the adapted existing screening tool. I have read the accompanying letter explaining the purpose of the research study and understand that:

- My participation is voluntary
- I may decide to withdraw at any time without penalty
- All information obtained will be treated in strictest confidence
- My name will not be identifiable and used in any written reports
- Feedback of the findings will be made available to me via the Nelson Mandela Bay Health District and
- I may seek further information on the research study from the researcher and the supervisors.

\_\_\_\_\_  
Name of the participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **ANNEXURE 9: INTIMATE PARTNER VIOLENCE SCREENING TOOL**

### **SCREENING TOOL FOR THE IDENTIFICATION OF INTIMATE PARTNER VIOLENCE (IPV)**

Source: Based on Joyner (2009)

#### **CONFIDENTIAL**

#### **A. PATIENT INFORMATION**

Name: \_\_\_\_\_ Age: \_\_\_\_\_

Current Residential Address: \_\_\_\_\_

Tel No: (h): \_\_\_\_\_ (w): \_\_\_\_\_ (cell): \_\_\_\_\_

Marital status:

Married  Same-sex partner  Single  Co-habiting  Divorced

If in a relationship, how long have you been in this relationship?

How many dependents do you have? \_\_\_\_\_

#### **B. PHYSICAL HISTORY**

1. Do experience any of the following symptoms:

Headaches  Fatigue  Chronic pain with no specific cause

2. Are you on treatment for Hypertension?

\_\_\_\_\_

If yes, how long? \_\_\_\_\_

## C. MENTAL HEALTH

Do you experience any of the following symptoms?

1. Worried/Stress
2. Sleeping problems
3. Exhausted/Tired
4. Sad/crying for no reason
5. As a person there are things that you enjoy doing – do you find that you no longer enjoy these things? i.e. listening to music or going out with friends
6. Do you sometimes have the feeling as though you are going to hear bad news?
7. a) Have you ever felt you should cut down on your drinking?   
b) Have people annoyed you by criticising your drinking?   
c) Have you ever felt bad or guilty about your drinking?   
d) Have you ever had an eye-opener (drink) first thing in the morning too steady your nerves or to get rid of a hangover?
8. Have you used substances such as dagga or tic? Any others? (e.g. mandrax, glue, benzene or solvents, ecstasy, cocaine/crack)   
In the last month?  In the last year?
9. How many days last month did you take painkillers?  1-5 days  6-10 days  
 11 -20 days  every day

### Clues

#### Answers:

2,3,4,5	Depressive disorders
1,2,6	Anxiety disorders
7	Alcohol use disorders
8,9	Substance abuse disorder

## D. HISTORY OF ABUSE

1. Do you experience any kind of physical, emotional, sexual or financial abuse:

Hitting  Being insulted  Unwanted Touching  Withholding Money

Kicking  Shouting  Infidelity  Taking Money

Weapon  Sexually Transmitted Infections  Financial Decisions

Pushing  Threats  Forced Intercourse  Other \_\_\_\_\_

Choking  Controlling your activities/day

Burns  Other \_\_\_\_\_

Do you see you family/friends regularly

Are you restricted to contact your family/friends

Other \_\_\_\_\_

**MOST RECENT ABUSIVE INCIDENT:**

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Patient's description of most recent abuse (Use exact words as far as possible.  
Describe severity of abuse.)

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**E. REFERRAL**

PHCF Psychologist  Social Worker  Psychiatric Professional Nurse   
Secondary Hospital  Private Psychologist  Other \_\_\_\_\_

Adapted by: R.Felix for a Master's study  
Nelson Mandela Metropolitan University, Department of Nursing Science